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Consultation on an Offshore Renewable Energy Strategic Action Plan 2009-2020

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FOREWORD

By Arlene Foster, MLA, Minister of Enterprise, Trade and Investment

Ministerial Foreword

Northern Ireland is fortunate to have considerable offshore renewable energy resources, a strong engineering and manufacturing base and significant port and harbour facilities to enable the successful development of an offshore renewable energy sector.

Such development would address Northern Ireland's need to increase significantly its renewable electricity output to reduce our reliance on imported fossil fuels and reduce carbon emissions. When my Department consulted recently on our long term energy policy in the draft Strategic Energy Framework, I proposed a challenging 40% renewable electricity target for 2020 and I would expect offshore renewables to contribute to this goal. In addition, the development of offshore renewables presents a major investment potential and could lead to new market and employment opportunities for Northern Ireland companies in the supply chain, not just for local needs but for growing national and international markets.

However, the marine environment is not empty – the coast and the sea are already home to many important plant and animal species and also contribute to Northern Ireland's economy through fishing, tourism and recreation and ports and harbour activity. I am committed to developing Northern Ireland's offshore renewables sector but this must be done in a sustainable manner. We need to address the potential impacts which such developments may have on the environment and other users of the sea.

That is why my Department has undertaken a Strategic Environment Assessment (SEA) of this draft Offshore Renewable Energy Strategic Action Plan and has actively engaged with stakeholders during this process to ensure that the key issues have been identified.

The findings and recommendations of the SEA indicate that offshore renewables could deliver a significant contribution to our renewable electricity targets, without significant adverse impact on the environment, provided relevant mitigating actions are taken both at a strategic and project level. In addition, it recommends that DETI should establish an Offshore Renewable Energy Forum, building on its existing cross departmental Project Steering Group, to engage with relevant external stakeholders. The Forum would help advise on the ongoing development of this draft Plan which contains a programme of work designed to facilitate the successful and sustainable development of Northern Ireland's offshore renewable resources.

The draft SEA Environmental Report and Strategic Action Plan have been issued together for public consultation. We want to ensure that our proposals are right for Northern Ireland and, through the generation of offshore renewable electricity, will contribute to the key issues of climate change and reduction in greenhouse gases as well as the sustainable and productive use of the sea. I would urge you to consider both documents and let us have your views on our proposals.

Arlene Foster MLA
Minister of Enterprise, Trade and Investment.

INTRODUCTION

Strategic Energy Framework 2009

1. The Department of Enterprise, Trade and Investment (DETI) recently consulted on a new Strategic Energy Framework (SEF) 2009 for Northern Ireland. It sets out a vision for a much more sustainable system where energy is used as efficiently as possible; where much more of Northern Ireland's energy is from renewable sources; and where Northern Ireland ensures that all generation is as competitively priced as possible.

2. Four key energy themes have been identified within the draft SEF 2009:

   Competitiveness

   Northern Ireland remains overly dependent on fossil fuels for power generation, heating and industrial use. Energy will become increasingly expensive as fossil fuel resources decline, along with increased costs from EU and UK requirements associated with climate change. These requirements do, however, offer an opportunity for economic development in the energy and energy technology supply markets created by the Low Carbon agenda. They also encourage improved competitiveness through the deployment of sustainable energy practices and technologies.

   Accessing Northern Ireland's plentiful renewable energy resources and increasing levels of renewable energy generation remains the most viable option to reduce dependency and create greater price stability than is currently available.

   Security of supply

   Energy security is an issue of common European Union concern. With growing integration of regional energy markets and infrastructure, specific national and local solutions are often insufficient and DETI is working with counterparts in GB and ROI on complementary measures to strengthen both jurisdictions' security of energy supply policies and practices.

   While previously seeking to ensure that power generation in Northern Ireland was not wholly reliant on one particular fossil fuel, DETI acknowledges the limitations of this approach and will ensure that renewable energy is an integral part of the future security of supply strategy, while maintaining action on security of fossil fuel supply.

   Sustainability

   The drivers for ensuring that Northern Ireland's energy supply is sustainable - by which, in this context, we mean, "to meet the needs of present without comprising the ability of future generations to meet their needs" have never been greater. DETI recognises the part that traditional energy generation has played in climate change. Acknowledging climate change as one of the drivers for sustainability, DETI will seek to achieve energy efficiency goals and increase the use of renewables used at an ambitious rate.

   DETI has identified the need for a co-ordinated approach across Departments to deliver a programme of actions across the range of renewable energy technologies and has established the Sustainable Energy Inter Departmental Working Group, led by the DETI Minister.

Infrastructure

Significant electricity grid strengthening is planned throughout the UK and ROI to carry out modernisation work and manage increasingly higher levels of renewables, particularly onshore wind. In Northern Ireland, major grid strengthening and ongoing interconnection with neighbouring networks are being planned. In addition, consideration will be given to the further growth of the natural gas network and the development of gas storage.

3. The overall aim of SEF 2009 is to set out the direction of travel on energy policy for the energy industry and consumers, the key milestones and targets associated with this approach and to send clear signals of Government's priorities over the short to medium term. It provides the overarching framework for the range of actions to develop Northern Ireland's renewable resources, including offshore wind and marine renewables. Consultation on the draft SEF 2009 has recently closed and DETI is considering the responses and plans to issue a finalised SEF in early 2010.

EU and UK Renewable Energy Policy

4. In Spring 2007, EU leaders agreed to create a common European Energy Policy. This has resulted in the EU vision for energy in the period to 2020 based on three fundamental pillars of sustainability, security of supply and competitiveness.

5. The EU Renewable Energy Directive (RED) which was agreed and published in June 2009 has set an EU target of 20% renewable energy consumption i.e. across electricity, heat and transport, by 2020, including a specific 10% target for biofuels. As a Member State, the UK target has been set a target of 15% renewable energy by 2020 with a 10% biofuels target. In addition to these headline targets to be achieved by Member States, the RED also requires the development of a National Action Plan including a series of actions to be undertaken to facilitate this growth e.g. administration procedures, regulations and codes; information and training; access to the electricity grid and sustainability.

6. While energy policy is a transferred matter and therefore the responsibility of the NI Assembly, DETI continues to work closely with Department for Energy and Climate Change (DECC) on a wide range of UK wide activities, where it is appropriate and beneficial for Northern Ireland to do so.

7. Northern Ireland Departments contributed to the Low Carbon Transition Plan suite of documents published by DECC in July 2009, including the UK Renewable Energy Strategy (RES). The UK RES sets out the overall UK Plan on how it will achieve the EU target of 15% renewable energy by 2020. It contains a wide range of actions to facilitate, incentivise and support the increased use of renewables by Government, businesses, communities and individuals. Specific measures have been identified to encourage investment, remove barriers and bring forward the deployment of less well established technologies and currently more expensive, such as offshore wind and marine renewables.

8. The UK RES acknowledges that the Devolved Administrations are developing their own specific approaches to meet their particular circumstances. DETI will continue to work with DECC, its new Office for Renewable Energy Deployment and other relevant cross cutting groups as well as the other Devolved Administrations. Northern Ireland will contribute to and participate, as appropriate, in the UK wide policy areas relating to the overall UK 15% renewable energy targets.

9. Established in 1999, the British Irish Council (BIC) comprises representatives for the British and Irish Governments, the Devolved Administrations of Northern Ireland, Scotland and Wales with representatives from the Isle of Man, Guernsey and Jersey. BIC acts as a Forum within which members can consult and exchange information with a view to co-operating on areas of mutual interest. The BIC Marine Energy Workstream has identified opportunities for greater communication and collaboration on areas such as Strategic Environmental Assessments, academic strengths, operational issues and communication with the EU on support for and acknowledgement of the importance of marine developments. This workstream can offer added value

to the wide range of ongoing work within each of the administrations.

Current and Proposed Northern Ireland Renewable Energy Targets

10. Northern Ireland's current renewable energy target is that by 2012, 12% of electricity consumption should be met from indigenous renewable sources and, of that 12%, 15% should come from non-wind resources. Renewable electricity currently stands at 8.5% of electricity consumption and DETI expects that the 2012 targets will be achieved, primarily from onshore wind. To date, there has been limited commercial scale development of non-wind renewable energy in Northern Ireland.

11. Onshore wind energy is currently the most readily available and affordable renewable energy for power generation and it is envisaged that it will continue to be the principal source of renewable electricity generation. The 2008 All Island Grid Study concluded that it was technically feasible for up to 42% of power generation to be from renewable sources, mainly from onshore wind. However, DETI is actively seeking to diversify Northern Ireland's renewable energy portfolio.

12. SEF 2009 has proposed a new strategic objective to increase the amount of electricity from renewable sources to 40% by 2020. This proposal is based on work to establish the evidence base for a number of possible scenarios for increased renewable deployment. No scenario will represent a firm prediction of what our energy mix will look like by 2020 – the market and investors will ultimately decide what will be built within the confines of appropriate market and environmental regulation - rather they represent realistic possibilities, given the renewable resources in Northern Ireland and the renewable technology development and possible deployment by 2020.

13. Technological, economic, environmental or other circumstances may change in respect of renewable energy and fossil fuel energies and DETI will keep the renewable electricity target under review during the period to 2020 with the aim of optimising the range of technologies capable of generating renewable electricity to meet SEF's overall vision.

The UK Marine Environment

14. "Our Seas – a shared resource ", published in April 2009, set out the UK High Level Marine Objectives which will form the basis of much of the work being undertaken both at the UK and NI level over the next few years to ensure the achievement of sustainable development in the UK marine area. The overall UK Government vision is for clean, healthy, safe, productive and biologically diverse oceans and seas.

15. The UK High Level Marine Objectives are

- Achieving a sustainable marine economy,
- Ensuring a strong, healthy and just society,
- Living within environmental limits,
- Promoting good governance and
- Using sound science responsibly.

16. The Northern Ireland Executive agreed to this vision and the High Level Marine Objectives. A number of Northern Ireland Departments eg the Department of the Environment (DOE), the Department for Regional Development (DRD), the Department of Enterprise, Trade and Investment (DETI), the Department of Culture, Arts and Leisure (DCAL) and the Department of Agriculture and Rural Development (DARD) have a key role to play in the sustainable development of the marine environment, which includes the development of its offshore renewable energy potential.

17. DETI has undertaken a Strategic Environmental Assessment of this draft Offshore Renewable Energy Plan to ensure that the potential impacts of such developments on the marine environment and other users are fully taken into account. This will not only inform the development of the draft plan but its subsequent implementation which will be taken forward within the principles of sustainable development.

Draft NI Sustainable Development Strategy

18. The Office of the First and deputy First Minister issued "Everyone's Involved "; Sustainable Development Strategy "in October 2009 for public consultation. DETI will contribute fully to the development of the Implementation Plan to emerge from this Strategy.

The productive and sustainable use of the sea

1. As noted in Chapter 1, Northern Ireland is likely to continue to meet a high level of its renewable electricity output from onshore wind. It is currently the most developed and cost effective renewable resource but its increasing deployment across Northern Ireland has to be carefully considered with regard to landscape and environmental issues. The recently published PPS18 supported the further development of renewables but noted key issues which had to be considered.

2. An increase in other technologies capable of contributing to the proposed 40% renewable electricity target would help diversify Northern Ireland's renewable portfolio and would reduce our reliance on onshore wind with a possible lower number of onshore wind turbines than may otherwise be the case. While offshore wind is more technologically challenging and currently more expensive than onshore wind, it does offer greater potential with stronger and more consistent wind which can provide higher power outputs and greater generating times.

3. Although earlier studies have confirmed offshore wind potential on the North and East Coasts of Northern Ireland, there are currently no offshore wind developments in Northern Ireland. The offshore wind sector has developed considerably over the last few years and this presents an opportunity for Northern Ireland to benefit from these developments in the rest of the UK, ROI and Europe which have already addressed a number of the technological and operational challenges and requirements facing the sector.

4. The technology to harness wave and tidal energy is at an earlier stage of development than offshore wind but has the potential to contribute a significant level of renewable electricity. As with offshore wind, it is currently a more expensive technology than onshore wind. However, marine renewables, in particular tidal, can, unlike wind, offer a much more predictable resource for grid management purposes. There has been promising progress in the last two/three years with the ongoing testing of technologies and different devices. The deployment of the 1.2 MW MCT Sea Gen tidal stream demonstration project in Strangford Lough in 2008 was the world's first commercial scale project to generate to a national grid. This innovative project has drawn international attention to the potential in Northern Ireland waters and a number of national and international companies have indicated their interest in investing in Northern Ireland and developing offshore renewable projects here.

<u>Economic benefits of offshore renewables</u>

5. In preparation for the SEF 2009, DETI commissioned work, in advance of this SEA work, to develop a range of possible scenarios for renewable electricity across all the renewable technologies. These scenarios included estimates for offshore wind and tidal ranging from 150 MW to 400MW by 2020 - wave was not included as its contribution by 2020 was considered by that study to be limited.[1] While DETI acknowledges that these figures reflect the significant challenges facing offshore renewables to be able to make a significant contribution by 2020, it considers that they are conservative and that higher levels could be achieved. In addition, it is also considered that greater offshore

[1] This would equate to a contribution of between 9% and 25% to the proposed 40% renewable electricity target for 2020. Based on an estimated electricity demand of approximately 11,000 GWh in 2020 with an installed capacity of 4000MW, a 40% renewable electricity target would be in the region of 1,600MW depending on the technologies used.

development would be seen in the post 2020 period as technology develops further.

6. Notwithstanding the reservations on these estimates, this work identified that such levels of offshore renewables could give rise to possible investment ranging from £330m to £880m by 2020, based on current investment costs of £2.2m per MW for offshore wind and tidal technologies.

7. In addition to such an investment, this same work considered the overall potential employment opportunities from renewables. With regard to offshore renewables, this is estimated to be 10 jobs per MW. The regional location of such jobs depends on the degree of maturity of the technology, the complexity of the supply chain and the proportion of jobs that flow abroad through the design and manufacture of machinery and technology. As the offshore sector is still relatively immature with only a few key companies, the potential Northern Ireland employment within this sector would be lower than this estimate but companies such as Harland & Wolff, B9 Offshore Developments and Deep Blue Renewables are already successfully working in this sector.

8. Additional income streams could also arise for ports with suitable infrastructure from the construction and maintenance of the wind, wave and tidal energy devices. For example, the study "UK Ports for the Offshore Wind Industry : Time to Act " (January 2009) identifies a potential market for UK ports totalling over £800m up to 2020, from the new offshore wind devices that will be required to be installed in UK waters to meet the UK Government's 2020 renewable energy targets. Some £110m additional income could be generated for ports by new wind farm developments in the Irish Sea alone.

9. DETI and Invest NI view renewable energy as an economic growth area and are currently undertaking work to quantify the benefits and supply chain potential of the offshore renewables sector through the DETI led Sustainable Energy Inter Departmental Working Group and through studies undertaken in collaboration with counterparts in the Republic of Ireland. Chapter 4 sets out further details on how Northern Ireland companies can be encouraged and supported to develop these new markets.

Economic Activity of other Users of the Sea.

10. Northern Ireland's waters are already productive and provide direct and indirect economic benefits from a number of other sectors and industries – for example tourism, recreational angling, the commercial fishing industry, the telecommunications sector and ports and harbours. The Environmental Report considers the potential impact, mainly in environmental terms, on other users of the marine environment and proposes mitigating actions, where appropriate, to avoid or lessen any potential adverse effect.

11. Consideration has also been given to the contributions which these other main sectors make to the Northern Ireland economy. This is not a detailed socio-economic analysis but acknowledges, at a strategic level and using information from existing published sources and studies, the contributions from these other sectors. This is set out at **Annex A**. A more detailed analysis of the impact of individual offshore renewable projects on other users would be required at site specific level to meet the Environmental Impact Assessment requirements.

12. By implementing the strategic level mitigating actions identified in the recommendations of the Environmental Report, which aim to avoid or reduce any adverse impacts on the environment and other users, DETI considers that any adverse socio-economic effects could also be avoided at a strategic level. DETI would plan to develop offshore renewable electricity in line with the overall principle of sustainable development and productive use of the seas. We will continue to actively engage with stakeholders and existing commercial businesses to ensure that other marine sectors and potential conflicts of interests are taken into account throughout the implementation of the Plan.

Question on Chapter 2

Do you consider that the strategic economic benefits of renewables and other user users have been identified? If not, please tell us what should also be considered within this Strategic Action Plan.

The Strategic Environmental Assessment (SEA) and the draft Strategic Action Plan 2009 -2020

1. In compliance with the EU Strategic Environmental Assessment Directive[1], this draft Strategic Action Plan (SAP) has been the subject of a Strategic Environmental Assessment (SEA). The purpose of the SEA is to integrate environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development.

2. The SEA, which is being undertaken by AECOM consultants, has been managed by a DETI led Project Steering Group (PSG) comprising of other relevant NI Departments and key organisations i.e. DARD, the Agri-Food and Bio-sciences Institute, DoE, the Northern Ireland Environment Agency, DCAL, DRD, The Crown Estate and the Maritime and Coastguard Agency.

3. The SEA is a system of incorporating environmental consideration into strategic plans at an early stage of their development. There are a number of key stages within the SEA process - one of which was the development and public consultation in May 2009 of the Scoping Report. The Scoping Report set the context for the SEA, identified the topics to be considered, presented the baseline data and approach to be used to assess the effects which the development of offshore renewable energy might have on the environment and other users. The feedback on the Scoping Report from a wide range of key stakeholders who attended the seminar or commented on the report was very useful in developing the draft Environmental Report.

[1] EU Directive 2001/42/EC on the assessment of the effects of certain Plans and Programmes on the Environment and The Environmental Assessment of Plans and Programmes Regulations (NI) 2004.

The draft Strategic Action Plan 2009-2020

4. The overall aim of the SAP is to optimise the amount of renewable electricity generated from offshore wind and marine renewable resources in Northern Ireland's waters (i.e. out to 12 nautical miles) in order to enhance diversity and security of supply, reduce carbon emissions, contribute to the proposed renewable electricity targets by 2020 and beyond and develop business and employment opportunities for NI companies. The development of this resource will take into account the protection of the environment and the needs and interests of other users of the sea.

5. It will provide the framework within which offshore renewable energy can be developed through a competitive call, to be undertaken by The Crown Estate, for commercial projects. The SAP identifies a programme of enabling actions which will be essential to the development of this resource. It also includes actions to maximise the market opportunities to Northern Ireland companies of the development of offshore renewables, not just in Northern Ireland waters but throughout the British Isles to ensure they are well placed to capture the associated economic gains in terms of new business and employment opportunities.

The draft Environmental Report

6. The draft Environmental Report (ER) reviewed the overall energy and renewable policy context at EU, UK and local level. It also considered the marine environment policies including the current work on the UK Marine and Coastal Access Bill and the proposed NI Marine Bill and the implementation of the Marine Strategy Framework Directive.

7. It addressed the following SEA topics which could be affected by the draft SAP:

   - Water, soil, sediment,
   - Biodiversity, flora and fauna including fish, birds, marine animals and mammals,
   - Cultural heritage including archaeological heritage,
   - Population and human health including commercial fisheries, ports and harbours, recreation and tourism,
   - Material assets such as cables/ pipelines ,
   - Landscape/seascape,
   - Climactic factors.

8. Earlier studies had identified offshore wind resource off the North and East Coasts and tidal resource off the North Coast, around Rathlin, off the Copeland Islands and in Strangford Lough, where the MCT Sea Gen 1.2MW tidal stream demonstration project is currently operating. While more limited, wave resource had been noted off the North Coast. A review of the main characteristics of current offshore renewable energy devices was also undertaken as part of the ER.

9. For each of the SEA topics at 7 above, the ER undertook a generic assessment of offshore developments in Northern Ireland waters, considering the characteristics of the different technologies. This assessment was then refined to focus on the key resource zones which had been identified by earlier studies and developer interest.

10. The resource zones are set out in **Annex B.** Again each SEA topic was considered within each of the resource zones, but still at a strategic level. While the SEA focussed on these resource zones, this would not preclude development outside these zones as all Northern Ireland waters have been covered in the generic assessment. This was then followed by a cumulative assessment which considered a number of possible future development scenarios and reviewed the cumulative effects of different levels of development within each of the resource zones. The cumulative effects of other plans and programmes were also considered.

<u>The results of the SEA</u>

11. In light of these assessments, the ER has concluded that between 900MW and 1200MW of electricity could be generated by 2020 from offshore wind and marine renewables (tidal arrays) in Northern Ireland waters, without significant adverse effects on the environment.

12. In terms of offshore wind, there is the potential for between 600 MW and 900MW to be developed in two main zones –one off the North Coast and the other off the East Coast. The main factor influencing the possible amount that could occur is the potential for offshore wind farm developments to have an effect on the Giant's Causeway World Heritage Site and the Causeway Coast AONB. The level of likely effect would be influenced by the location, size and configuration of any offshore wind development, with potential effects reducing with distance offshore and to the west of the overall study area. The ER considered that any potential effects on seascape would need to be assessed in greater detail at the project design and development stage.

13. As regards tidal development, of the 5 resource zones noted in Annex B, the 3 smaller zones at Maiden Islands, the Copeland Islands and Strangford Lough have not been considered suitable for commercial scale development, due to potential significant adverse effects on the environment and other users. This leaves tidal resource zones on the North Coast and round Rathlin Island and Torr Head which could contribute 300 MW.

14. Given that there is limited potential in terms of wave resource, this technology has been excluded from the overall potential target setting. However, this does not preclude wave development from the SEA or inclusion within this overall Plan, should projects come forward.

15. The results above reflect the main findings of the SEA but the ER notes that there are still notable gaps in some baseline data, in particular relating to benthic ecology, seabirds, marine mammals and reptiles and commercial fisheries. The likely significance of effects will also be influenced by the particular characteristics of the projects

being developed (including the effective use of mitigation measures identified for each resource zone) and the locations within the zones in which they are deployed.

16. The ER recommends that DETI should establish an Offshore Renewable Energy Forum, building on its existing cross departmental Project Steering Group, to engage with relevant external stakeholders. The Forum would help advise on the ongoing development of this draft Plan.

17. A fundamental element of the SEA process is mitigation to avoid or reduce the potential effects on the environment and other users. In this case, the ER has proposed measures, on which the Forum would advise DETI, at Strategic Action Plan and also project level as follows:

    - Consider a cross departmental approach to filling strategic data and knowledge gaps and increasing the collection and availability and accessibility of current data sets.

    - Promote proposals for the adoption of a "deploy and monitor "approach to the deployment of commercial scale development on a phased approach, to increase knowledge of possible impacts as well as building on information from other developments such as those being deployed in the Pentland Firth.

    - Examine the opportunities of preparing locational guidance to assist developers, stakeholders and decision makers in the selection of specific sites for development.

    - Develop a project level mitigation strategy to ensure that the necessary mitigating actions, as identified in the ER, are satisfactorily considered and addressed as individual projects come forward –e.g. that certain surveys/monitoring regimes would be a requirement for development consent .

18. Subject to the outcome of the public consultation process on the ER and the SAP, DETI would plan to include these mitigation measures as actions within a finalised SAP.

19. The above is a brief resume of the ER and its key findings and recommendations. The ER, which is an extensive and technical document along with a Non –Technical Summary and this draft Plan can be found on the dedicated SEA website www.offshorenergyni.co.uk

Questions on Chapter 3

On the basis of the assessments carried out in the ER, do you agree with the overall results and proposed mitigation measures (paragraphs 11 -18).

If not, please tell us why. Please note that the above is a resume of the extensive ER which contains the detailed analysis behind the overall results.

The Draft Strategic Action Plan 2009-2020– proposed aim, targets and key actions

The Development of the SAP

1. DETI has developed this draft SAP to set the overarching framework for a competitive call, to be undertaken by The Crown Estate for commercial projects. It includes a range of short, medium and longer term actions to facilitate the development of offshore wind and marine renewable energy in Northern Ireland.

Aim of the SAP

2. The overall aim of the SAP is;

   to optimise the amount of renewable electricity generated from offshore wind and marine renewable resources in Northern Ireland's waters in order to enhance diversity and security of supply, reduce carbon emissions, contribute to the proposed renewable electricity targets by 2020 and beyond and develop business and employment opportunities for NI companies.

   The development of this resource will take into account the protection of the environment and the needs and interests of other users of the sea.

3. The following overall target is proposed, subject to the outcome of this consultation:

   To develop at least 600 MW of offshore wind and 300 MW from tidal resources in Northern Ireland waters by 2020. [1]

4 The draft SEF 2009 indicated a direction of travel for energy and renewable energy to 2020, but the detailed breakdown will depend on how investors respond to the market and overall investment and economic conditions. On the basis of the ER assessment, it is clear that offshore renewables have the potential to make a significant contribution to the proposed 2020 renewable electricity targets.

5 .The current global recession makes it more difficult to state how quickly these less commercially developed and currently more expensive technologies will be deployed , compared to ,e.g. onshore wind. We do, however, want to send a strong signal to the sector of our intention to move forward and optimise the contribution from offshore renewables and this draft Plan sets out the strategic framework for a range of actions to encourage and facilitate that deployment.

6. DETI will keep these MW targets under review in light of the ongoing development and deployment of offshore renewables and progress against the range of actions set out within this Plan over the next few years.

The Crown Estate and a competitive call

7. The Crown Estate (TCE) is one of the UK's largest property owners with significant urban, rural and marine estate. It is an independent organisation whose surplus revenue is paid to HM Treasury. TCE's marine estate includes over 55% of the UK's foreshore, the beds of tidal rivers and estuaries and almost all of the seabed out to the 12 nautical miles territorial limit around the UK. In recent years, TCE has worked with the offshore wind sector to develop these resources. On completion of the SEA of DECC's proposals to develop 25GW through nine zones in GB waters and the Renewable Energy Zone, TCE is now proceeding with a Round 3 offshore

[1] This installed capacity could equate to a contribution of over 50% towards the proposed 40% renewable electricity target for 2020 This is based on an estimated electricity demand of approximately 11,000 GWh in 2020 with an installed capacity of around 4000MW, A 40% renewable electricity target would be in the region of 1,600MW depending on the technologies used.

wind development. This Round does not include Northern Ireland waters.

8. Following the completion of an SEA assessing the potential for wave and tidal energy in Scotland by the Scottish Government in 2007, TCE announced in September 2008 an application process for commercial sea bed lease options in the Pentland Firth strategic area for marine energy devices. In response to the competitive call, 42 applications were received for wave and tidal deployment and TCE in May 2009. TCE is currently evaluating these applications and would plan to issue agreements for commercial leases in early 2010.

9. Through the GB Offshore Wind Rounds and the Pentland Firth development, TCE has built up significant expertise in working with Governments and the renewables sector to develop these offshore resources. Its stated policy is that, in addition to developments at Pentland, other areas with suitable resources will be offered to the market in due course taking into account a range of factors, including developer interest.

10. As regards offshore developments in Northern Ireland, DETI has actively engaged with TCE and will continue to work closely with them through the remaining stages of the SEA and post - SEA process to take forward a competitive call for commercial projects in Northern Ireland waters in 2010-2011. While each geographical location presents different circumstances and challenges, the experience gained to date throughout the rest of the UK can benefit developments in Northern Ireland waters and enable offshore renewable energy make its contribution to NI and overall UK renewable electricity targets for 2020 and beyond.

11. An estimated timeline, which would be subject to review as the SAP progresses, is as follows;

Spring 2010	Finalisation of the SAP post SEA
By end 2010-2011	TCE competitive call for projects
By end 2011-2012	Possible TCE agreements for lease
By end 2012-2013	Consenting/licensing considerations, including EIA requirements.
2014 -2015 onwards	Initiation stages for projects leading to subsequent deployment.

Key actions

12. There are a number of critical actions which will need to be addressed to support the overall aim and which can be grouped as follows:

- the Electricity Grid;
- Infrastructure and Supply Chain;
- Regulatory and Legislative Framework and
- Support regime.

The Electricity Grid

12.1 Develop an appropriate reinforcement programme of the NI Grid, to be completed in time to handle efficiently the increasing renewable electricity generated offshore.

Electricity networks transport electricity from the point of generation to the point of use. Connection to a robust grid system within an appropriate timeframe is an essential enabler for all renewable technologies and will be a critical issue for offshore generation.

The All Island Grid Study, published in January 2008, concluded that it was technically feasible for up to 42% of power generation to be from renewable resources. This would, however, only be possible in the context of a significant grid strengthening programme. The Grid Study concluded that some 200km of new grid transmission and around 1500km of grid distribution network would be required to manage this higher level of renewable power generation. Irrespective of accommodating the higher levels of renewables, the grid is

comparatively weak in the West of Northern Ireland, and this must be addressed to protect customers from unplanned power outages in that area.

NIE (the Grid owner) in co-operation with , SONI, (the System Operator) and through liaison with DETI and NIAUR (the Northern Ireland Authority for Utilities Regulation) has been engaged in preparing options for grid strengthening through its Renewables Integration Development Project to address current weaknesses and manage the projected higher levels of renewables. Initial estimates suggest that this overall programme of improvements could cost around £1billion over the next ten years with an expected lifespan of 40 years. This would be the most significant upgrade of the electricity Grid in Northern Ireland since the 1960s and will mirror developments in the ROI where Eirgrid is planning some £4billion Euros investment to 2025 and across GB, where network upgrading to 2020 will cost over £4.5billion. This work will include consideration of the generation from offshore renewables. The draft ER proposes that consideration should be given the possibility of offshore hubs to serve a number of developments.

The plan to increase the level of renewables to the 40% proposed in the draft SEF and the associated Grid work to accommodate it is now the subject of a separate SEA which will take into account, as appropriate, the research and findings of the offshore renewables SEA. It is expected that the Grid SEA will be completed in early 2011.

As part of the development of the grid proposals there may be an opportunity to examine options for coordinating onshore and offshore development activities required to support offshore wind, wave or tidal development that may occur in a similar location. This could have a number of benefits in terms of reducing the potential environmental effects associated with cabling by coordinating and focusing the provision of specific infrastructure requirements e.g. onshore connections and reducing costs and increasing confidence amongst developers.

12.2 Complete work by 2010 with Scotland and the Republic of Ireland on the joint Isles Project to assess the potential for an offshore regional marine electricity grid linking Ireland and Scotland and consider its findings and recommendations.

In addition to the planned work to strengthen the onshore Grid and accommodate onshore and offshore renewables, DETI is working with the Republic of Ireland and Scotland on the potential for an offshore grid. The study will examine the feasibility of the construction of an offshore electricity transmission network linking potential offshore sites of the west coast of Scotland, the north and east coasts of Northern Ireland , the Irish Sea and the west coast of Ireland. The study is estimated to cost £1.6m and is being supported by the three Governments and the EU Interreg IVA programme. It will quantify the long-term strategic benefits that could arise from such a development and will propose a business case for the construction of the grid. Key issues for consideration will include technology and infrastructure, environment and planning, regulation, finance, construction and deployment.

Infrastructure and Supply Chain

12.3 Continue to work with Invest NI, The Crown Estate and others in promoting the opportunities for local manufacturing and service sectors to secure offshore energy supply chain business in relation to projects considering investment in NI waters and also in the wider international and national markets.

The growth of offshore renewables could lead to new infrastructure and supply chain opportunities not just for developments within Northern Ireland waters but for the wider national and international markets. Key areas of supply chain opportunity could include research and development; device manufacturing and assembly; installation and decommissioning engineering services and operation and maintenance services. In addition, ports with suitable enabling infrastructure – large areas of operational storage (i.e. greater than 8 ha.), high quay load bearing capacity and deep water access – could provide a focus for such activities.

This presents significant potential opportunity for Northern Ireland companies bringing additional economic benefits to Northern Ireland and creating skilled employment within the sustainable energy sector.

Invest NI has been actively developing this opportunity to assist Northern Ireland companies to supply into these markets. A formal association of Offshore Wind companies has been established and following a marketing exercise of local

capabilities, orders are now being secured. A similar association for the marine sector is being considered.

Work commissioned by Invest NI and Sustainable Energy Ireland (SEI) considered the research, academic, engineering, maintenance and other support services required for the successful operation of an ocean energy sector. The Review of Engineering and Specialist Support Requirements for the Ocean Energy Sector has been completed and noted

- the long established marine research facilities at QUB;
- the key port facilities in Northern Ireland, in particular Belfast Harbour and Londonderry, with extensive quay facilities and support services; and
- the long engineering tradition with current expertise across the overall supply chain and the potential for its development to meet the markets needs.

Invest NI is also working with SEI on an Economic Study for Ocean Energy Development in Ireland which will consider further the economic impact of the sector. This work will feed into the SAP and its actions as it develops.

While many companies would have a general understanding of the market 's needs, Invest NI's actions to provide detailed information on the sectoral opportunities and increased networking aim to capitalise on this growing market.

In addition, through DECC and The Crown Estate programme to support the offshore wind supply chain, Invest NI will be hosting the Northern Ireland element of a UK wide campaign in March 2010. This series of regional briefings will act as a 'marketplace' for all those involved in the development of offshore wind sites over the next few years as well as an information sharing forum for other stakeholders who have an interest in offshore energy development.

Business and employment opportunities within the offshore renewable sector will form a key element of the ongoing work of the DETI led Sustainable Energy Inter Departmental Working Group's sub Group on Economic Opportunities (Green jobs).

Regulatory and Legislative Framework

12.4 Develop a practical way forward with the ROI for handling offshore renewable energy projects in waters in, around or adjacent to state boundaries near Loughs Foyle and Carlingford and agree appropriate operational arrangements.

The Northern Ireland Act 1998 defines Northern Ireland as including "so much of the internal waters and territorial sea of the UK as are adjacent to Northern Ireland." Under the Territorial Sea Act 1987, UK territorial waters extend to 12 nautical miles.

Marine boundaries at Carlingford Lough and Lough Foyle have not been formally de-limited. Both these areas have the potential to deliver offshore renewable electricity but this potential will not be able to be realised while there is a lack of clarity in relation to the operational regime e.g. the leasing , consenting and licensing and environmental monitoring requirements, which might pertain. Such uncertainty may deter developers. In addition, the ROI has recently commenced an SEA of offshore renewable energy within its waters.

DETI will therefore work with the relevant authorities in NI, ROI and UK to consider this issue and identify possible appropriate and practical operational arrangements to enable this renewable resource to be productively developed.

12.5 Continue to ensure that DETI's offshore energy interests are effectively represented within the development of policy and legislation for the forthcoming Northern Ireland Marine Bill and other marine related work e.g. the Marine Strategy Framework Directive.

Within Northern Ireland, DOE is leading on significant UK wide work to introduce a legislative framework for an integrated approach to the management of the marine environment, based on the principles of sustainable development.

For some of this work Northern Ireland is included within the UK Marine and Coastal Access Bill – e.g. the reform of marine licensing for activities currently covered by Part II of the Food and Environment protection Act 1985 and the development of a UK wide Marine Policy Statement (MPS). The MPS will set out a framework of high level objectives for the marine environment and how it should be managed in order to contribute to the achievement of sustainable

development of the UK marine area. It will bring together the marine aspects of existing policies for different sectors and will articulate how they relate to each other. It is the intention that the MPS will be in place by mid 2011.

DOE is also leading on the development of a Northern Ireland Marine Bill which will address a number of areas which fall within Northern Ireland's devolved settlement arrangements. The development of marine plans will translate the policies of the MPS in more detail to the local level. Together the MPS and the associated marine plans will set the long term direction of the use of the marine environment; provide increased certainty for business and other users; promote the sustainable use of marine resources and help users of the sea and coastal communities understand what is happening in the marine environment.

In addition to marine planning, the Northern Ireland Marine Bill will also contain provisions for marine nature conservation, possible further streamlining of licensing of devolved activities and proposals for better integration of all functions within the marine environment. DOE intend to consult on proposals for this Bill in 2010, with the aim of introducing a draft Bill to the Northern Ireland Assembly in 2011.

The shared MPS and the marine plans will also play an important role in helping the UK to deliver its obligations within the Marine Strategy Framework Directive, to be transposed by July 2010, which sets the overall goal of achieving "Good Environmental Status"in European sea by 2020.

The SEA of this draft Plan has researched and co-ordinated a significant volume of spatial data on the Northern Ireland marine environment and the activities of other users of the sea. While this information will be very useful as DOE takes forward its marine planning work as indicated above, this draft Plan is not a marine plan and it is not the role of the SEA or this Plan to deliver marine spatial planning.

DETI is a member of the DOE led Marine Inter Departmental Group and will continue to work closely with DOE and other Departments to ensure that the potential for offshore renewable energy to contribute to climate change mitigation and sustainable development are fully acknowledged and recognised within the overall marine planning framework to be developed.

12.6 With The Crown Estate and the Northern Ireland Environment Agency, develop during 2010-2011 streamlined administrative guidance for developers and officials on the licensing and consenting regimes for offshore renewable energy projects.

In advance of the potential further streamlining of consenting regimes within a Northern Ireland Marine Bill, there is scope to consider more immediate actions to set out clearly for developers and regulators respective roles and responsibilities and timeframes for the licensing and consenting of offshore renewable energy projects.

The current offshore electricity licensing and consenting regime involves a lease from The Crown Estate, as owners of the seabed; a Food and Environmental Protection Act (FEPA) licence from the NIEA, required for placing anything on or removing material from the seabed, and an electricity generation consent from DETI under the Electricity Order 1992. Within their respective legislative frameworks, NIEA, DETI and DOE Planning Service (in respect of any land based development arising from the project) require three separate Environmental Impact Assessment (EIA) regulations to be met.

The development of a streamlined and timetabled procedural guide would provide clarity for all parties and would help create a smooth development pathway for future offshore renewable energy projects coming forward –e.g. the submission of one EIA document to meet the necessary requirements rather than three separate documents.

12.7 Work with DECC to put in place the necessary offshore energy production and decommissioning regime, similar to that in force in GB waters, for offshore renewable energy installations in NI waters.

The Energy Act of 2004 sets out a range of requirements in relation to the offshore production of energy , including the application of safety zones and statutory decommissioning regimes for offshore renewables energy (wind, wave and tidal) installations and related electricity lines. While these provisions in the Energy Act 2004 do extend to Northern Ireland, our territorial waters were not included in the definition of geographical coverage and therefore, these provisions (and the additional provisions introduced in the Energy Act 2008) have no practical effect.

This legislative gap means that Northern Ireland waters are not covered in relation to the safety zone or decommissioning regimes which are currently in place in GB waters. The Crown Estate's lease to the one operating offshore energy project in Northern Ireland waters, MCT's Sea Gen at Strangford Lough, addresses this issue. However, it will be important for Northern Ireland to have in place a regime consistent with the rest of the UK, in advance of any commercial developments entering NI waters.

DETI will therefore work with DECC in relation to the introduction, through primary legislation, of the necessary powers to develop this regime for Northern Ireland waters. DETI will develop proposals, based on those operating within GB, and will undertake a full public consultation on these proposals and draft legislation which will be considered in due course by the Northern Ireland Assembly.

Support Regime

12.8 Continue to develop the Northern Ireland Renewables Obligation (NIRO) to encourage the generation of electricity from offshore and marine renewables and to agree with DECC the transfer of the vires from DECC to DETI to issue offshore Renewable Obligation Certificates.

The main support mechanism for the production of renewable electricity in Northern Ireland is the NIRO. It operates in tandem with similar mechanisms in the rest of the UK and places an obligation on electricity suppliers to account for a specified and increasing proportion of their electricity from renewable sources. Evidence is by way of Renewable Obligation Certificates (ROCs), which are issued to the generators, and have a monetary value and are traded on a UK basis. To date, the NIRO has been very successful in bringing forward the more economic renewable technologies, particularly onshore wind.

However, as already noted, to meet longer term needs and ensure greater diversity and security of supply, it is critical to encourage the growth of other less well developed and currently more expensive technologies such as offshore wind and marine technologies.

Following revisions to all of the UK mechanisms from 1 April 2009, the NIRO now offers different levels of ROC support depending on the status of technologies. The current position is that offshore wind will receive 1.5 ROCs per MWh and marine technologies will receive 2 ROCs per MWh.

DECC expect offshore wind to make a significant contribution to the UK's 2020 renewable targets and is considering the current pressures faced by the offshore wind sector. Although the economic downturn and subsequent changes in the interest and exchange rates have had an effect on all renewable sectors, DECC considers that offshore wind has been particularly affected due to specific supply chain and market factors not faced by the other technologies. DECC is therefore currently consulting on proposals to increase the levels of ROCs for offshore wind for projects meeting certain conditions ie 2 ROCS for projects if they place orders in 2009-2010 and 1.75 ROCs for projects placing new orders in 2010-2011.

As currently framed, these proposals would not impact on Northern Ireland, as developments within Northern Ireland waters would not have reached that stage within the proposed timeframe for this enhanced support. Through a separate consultation[1], DETI is currently seeking views on a number of proposed amendments to the NIRO and this DECC offshore wind proposal is included within that consultation document.

While DETI can issue ROCs for renewable electricity generated onshore, the powers to issue ROCs in respect of offshore generation currently lie with DECC. This means that Northern Ireland, unlike Scotland, does not have the power to vary the ROC rates offered for offshore renewable electricity generation and the rates for England and Wales apply. Scotland can currently offer 5 ROCs for wave and 3 ROCs for tidal generation.

DETI has successfully used its NIRO powers onshore in relation to the extension of the higher rate of ROCs to encourage the deployment of landfill gas in Northern Ireland. As landfill gas had been extensively exploited in GB and had benefitted from I ROC per MWh, DECC has from April 2009 reduced the ROC level to 0.25 in GB. To date landfill gas has not been used here to generate electricity and with a much reduced level of ROC and higher operating costs, there was the risk that this resource would not be productively used in Northern Ireland. To ensure the use of this resource

[1] Proposed Changes to the Northern Ireland Renewables Obligation - DETI October 2009.

to generate renewable electricity, DETI recently secured EU agreement to continue to offer the higher rate of 1 ROC to reflect Northern Ireland's circumstances.

Research would need to be undertaken to identify whether higher ROC rates would be required to encourage investment in Northern Ireland waters. Such research would also need to consider the potential impact of higher support levels through the NIRO mechanism on consumer energy costs. DETI would, however, want to be able to consider the option of different levels of support and will therefore, as a priority, be seeking DECC's agreement, within the overall devolved settlement, to the transfer of the offshore ROC powers to Northern Ireland.

12.9 Ensure that Northern Ireland benefits from the range of NI and UK wide regimes supporting research, development and deployment of offshore renewable energy.

The Department for Employment and Learning (DEL) provides the two Northern Ireland Universities annually with Quality – related Research funding which enables them to conduct their own research, much of which is later supported by Research Councils and others. The total allocation for 2009-2010 academic year is just under £54m.

£2 m of the 2009-2010 allocation is being directed towards areas which encompass the theme of sustainability – this is in line with Research Council UK priorities. Within this framework Queen's University Belfast is undertaking work involving the commercialising of established technologies for renewable energy from wind, waves and tides and researching the potential for second generation technologies and devices.

A similar amount of funding will be available for suitable sustainability projects from 2010-2011. DEL recognises the need to support the renewables agenda and will consider further opportunities for research funding in the future.

At the UK level, there is a significant range of support for research and development and innovation for renewable energy, including offshore wind and marine technologies. Research Councils, the Technology Strategy Board, the Energy Technologies Institute, the Carbon Trust and the Environmental Transformation Fund all provide support at differing stages in the development of new technologies e.g. research, applied research and development, demonstration and pre-commercial deployment.

In the UK RES, DECC announced the development of a UK Marine Action Plan late this year and investment of some £ 60 M in UK marine energy infrastructure and technology, including wave and tidal energy testing centres. While much of this investment has been earmarked for specific GB locations, additional funding of £22M for a Marine Renewables Proving Fund for testing and demonstration of pre-commercial wave and tidal stream devices is available UK wide. Ongoing funding to support innovation and further development of offshore wind technology was also identified.

DETI and Invest NI will work with DECC to ensure that Northern Ireland and Northern Ireland companies and Universities are fully aware of these research funds and can, where appropriate, bid for UK wide resources which could enhance Northern Ireland's position as an offshore renewable energy investment location and also secure additional business for local manufacturing companies.

Questions on Chapter 4

Do you think that the proposed targets in paragraph 3 are appropriate? If not, what targets would be appropriate and why.

Do you agree with the range of actions identified to take forward within the SAP? If not, please state why and let us know how you would amend the actions or propose new, additional ones to help deliver the SAP.

Reporting, Monitoring and Evaluation

1. It will be important to be able to identify to what extent the Strategic Action Plan's objectives and actions are being achieved and what impact this Plan has had on the development of offshore renewables in NI waters. It will also be important to ensure that environmental and technological data within the ER is still relevant and appropriate as knowledge and experience of offshore renewables develop. To achieve this, a review of the Plan will be carried out in 2013-14 to inform decisions on future policy. The Plan would be subject to an overall evaluation post 2020.

2. In the interim and in order to feed into the review, DETI will produce an annual report on progress against the planned actions and any revised plans coming forward for the incoming year. This report will be considered by the Sustainable Energy Inter Departmental Working Group and the Offshore Renewable Energy Forum. It will also be forwarded to the ETI Committee and placed on the DETI website.

Question on Chapter 5

Do you agree with the reporting, monitoring and evaluation proposals? If not, please state why and what alternatives you would propose.

Next Steps and how to respond to the Consultation

1. DETI is seeking your comments on both the draft Environmental Report and the draft Offshore Renewable Strategic Action Plan and would welcome your views by **8 March 2010**. We have posed a number of consultation questions, see Annex C, on which we would appreciate your views but would also welcome your comments on any other aspect of the draft SAP and the ER.

2. All the documentation has been placed on a dedicated website www.offshorenergyni.co.uk

3. You can upload comments on to this website or alternatively send them by post.
   By e-mail to:
   www.offshorenergyni.co.uk
   By post to:
   Sandra McMillan,
   Sustainable Energy,
   Department of Enterprise, Trade and Investment,
   Netherleigh,
   Massey Avenue,
   BELFAST
   BT4 2JP.

Confidentiality & Data Protection

4. Your response may be made public by DETI. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'. Any confidentiality disclaimer that may be generated by your organisation's IT system or included as a general statement in your fax cover sheet will be taken to apply only to information in your response for which confidentiality has been specifically requested.

5. Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 1998 (DPA)). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

6. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

Copies of the Consultation

7. The Consultation Documents are being produced primarily in electronic form and may be accessed on the dedicated website www.offshorenergyni.co.uk

8. Copies may also be obtained from the address above or by telephoning 028 9052 9574. If you require access to this Statutory Consultation document in a different format – eg Braille, disk, audio cassette – or in a minority ethnic language please contact the Department on 028 9052 9574 and appropriate arrangements will be made as soon as possible.

Post consultation

9. Consultation responses to the Environmental Report will be published in Spring 2010 in a Post consultation Report. A post Adoption Statement will also be published, which will summarise how the findings from the SEA and consultee responses have been used to inform the development of this Plan, which DETI will then finalise and publish.

ANNEX A

Resume of the Economic contribution of other users of Northern Ireland's waters

Tourism

1. Tourism makes an important contribution to the Northern Ireland economy and tourism spending helps to support wide range of sectors including the accommodation and hospitality sectors, visitor attractions and cultural events, leisure/recreational and transport sectors.

2. Most recent estimates of the economic value of tourism are from 2005 and indicate that the total economic activity supported by tourism was £1782m sales by Northern Ireland producers, 3.7% of GDP and employing some 41290 or 5.2% of posts in Northern Ireland. There are no available /consistent figures for Northern Ireland coastal areas. The North Coast, one of the key offshore renewable energy zones of interest, has particular tourist appeal with the Giant's Causeway attracting over 712,000 visitors in 2007 – the top Northern Ireland attraction.

Source; Tourism in the NI economy -updated estimates to 2005. NITB and DETI 2008.

Recreational Angling

3. Northern Ireland is well endowed with angling waters which are used by local residents and tourists. A 2007 study commissioned by DCAL, the Loughs Agency, Irish Lights Commission and the Northern Ireland Tourist Board considered the social and economic impact of recreational fishing (coarse, game and sea angling). Examining the impacts was a complex issue due to the lack of formalised information on participation levels, however, through interviews and surveys, the study estimated a value for this sector and possible future development scenarios.

4. Based on 2005 participation and expenditure figures, it was estimated that the overall net economic benefit of sea angling (including domestic and visitor angling) to the Northern Ireland economy was £9.5m supporting around 134 full time equivalent jobs. This could rise to between £13.3m and up to £30.1m by 2015, depending on market conditions and impact of policy interventions designed to boost the numbers of local and visiting anglers and the typical expenditure of these anglers. An associated employment impact could increase to between 188 to 424 full time equivalents.

Source; Salmon and Inland Fisheries Annual Report 2007 DCAL.

Social and Economic Impact to NI and areas within Loughs Agency, of recreational fisheries angling and angling resources. PWC and Indecon July 2007.

Fishing Industry

5. The primary focus of the Northern Ireland fishing fleet is nephrops (prawn) the most abundant and valuable single resource available to the fleet. Whitefish (cod, haddock, whiting and plaice) shellfish and mussels are also caught.

6. The number of licensed fishing vessels in Northern Ireland at December 2008 was 351, of which 147 were over 10 metres. The main home ports for these vessels were Kilkeel, Ardglass and Portavogie. There is also an expanding inshore sector catching e.g. crab, lobster and harvesting bivalve shellfish.

7. In 2007, the total amount of fish landed by Northern Ireland registered vessels in the UK and abroad was 39,000 tonnes with a value of £34.3m of which 17,790 tonnes of fish were landed in NI ports with a value of £19.3m. In 2007, the fish catching sector employed 658 of which 557 were employed full time. In recent years the numbers of part time employees has risen.

8. Most Northern Ireland processing businesses operate exclusively as either nephrops, demersal, shellfish or pelagic processors and most are based in the three South Down ports of Kilkeel, Ardglass and Portavogie. This sector had an estimated combined annual gross turnover in 2007 of £69.3m with GB market representing 40% of production, home market 24% and the remainder in other EU countries. In 2007, the fish processing and marketing sector employed 728 full time equivalents.

Source; DARD.

Telecommunications sector

9. Northern Ireland's telecommunications networks, whether fixed line (voice and broadband) or mobile rely on the submarine communication cables which provide links to the rest of the UK and the world. In addition to customers in Northern Ireland, the submarine cables and their corresponding terrestrial cables interconnect with the ROI telecommunications network.

10. There are currently seven submarine telecommunications cables serving Northern Ireland; Sirius North (Virgin Media from north shore of Belfast Lough to Scotland, two BT cables - one from near Donaghadee to Portpatrick, Scotland and the second from near Ardglass to the Peel Isle of Man, Lanis 2 and 3 (Cable & Wireless), from the County Antrim coast above Carrickefergus to Saltcoats Scotland and Ballywalter, County Down to Peel, Isle of Man and Kelvin (Hibernia Atlantic) from Portrush to an interconnection point on the Hibernia North cable (Nova scotia, Canada to Southport England . This latter project was installed in June 2009 and is scheduled to be operational by end of 2009. It is part of the Hibernia North cable network which provides connectivity from Northern Ireland to North America, the rest of the UK and Europe. This cable has been part funded by DETI and the Department of Communications, Energy and Natural resources in ROI. The total project cost was £27m

Source; DETI.

Ports and Harbours

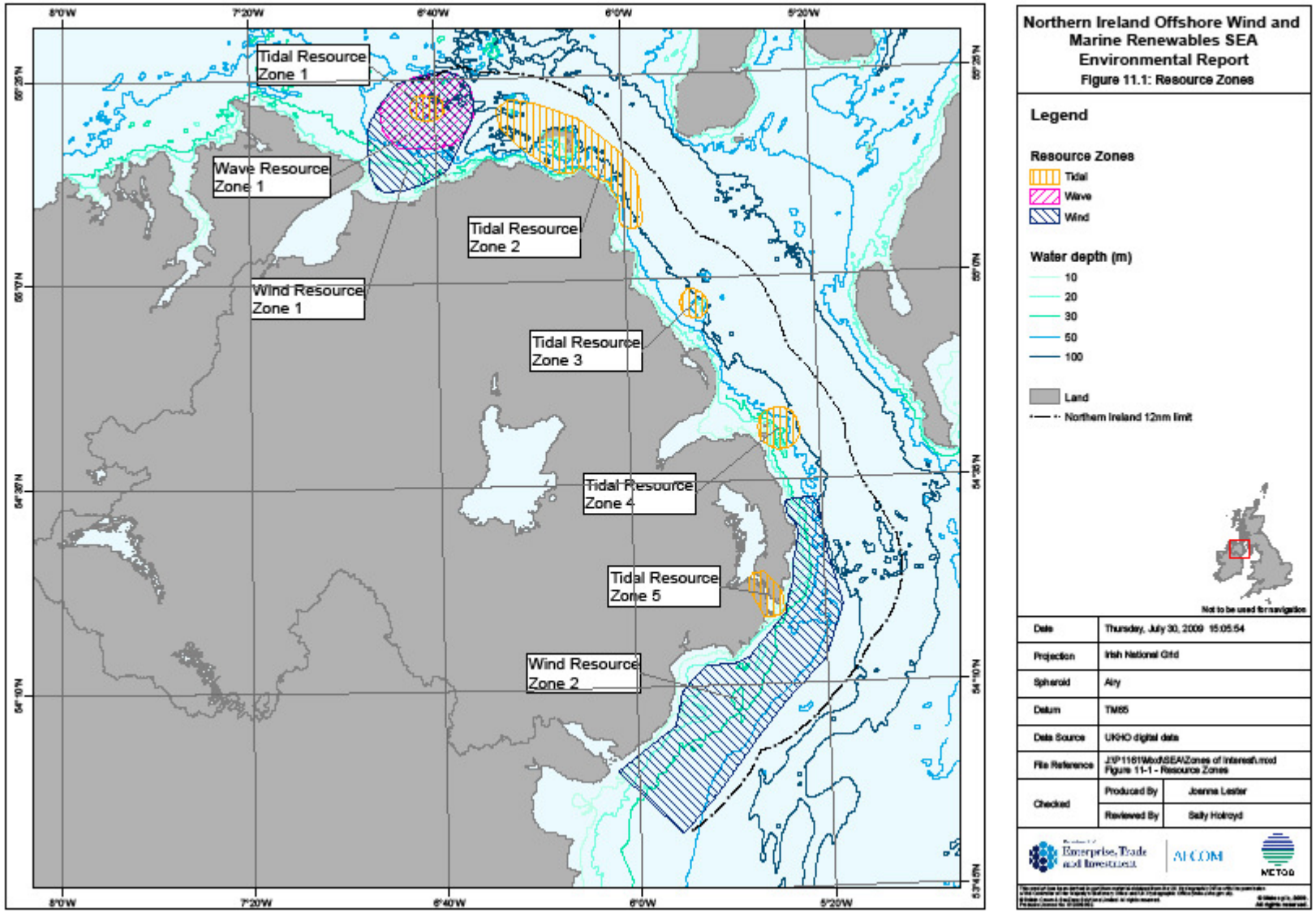
11. As an island, and an open, trading economy, Northern Ireland is acutely dependent on the sea for our trade and our seaports as gateways to that trade. There are five commercial ports in Northern Ireland – the four Public Trust Ports of Belfast, Londonderry, Warrenpoint and Coleraine and one in private ownership (Larne).

12. All Northern Ireland's commercial ports play a crucial role in terms of the Northern Ireland economy, handling some 95% of Northern Ireland's external trade. They serve as vital gateways, not only for trade between the island of Ireland and Great Britain, mainland Europe and elsewhere but for passenger and tourist traffic as well. The quick, economic and reliable movement of goods to the marketplace is vital for our economic development. Modern commerce and industry increasingly depends on supply chains which deliver goods and services at the moment they are needed.

13. The main commercial ports at Belfast, Larne, Londonderry and Warrenpoint have been developing their capacity to ensure that future growth in trade can be handled efficiently, and to cater for the operational requirements resulting from changes in shipping technology. They have also been capitalising on their potential to act as economic drivers through developing logistics/distribution facilities, and diversifying into other value-added activities.

14. This role of the ports is illustrated by the Port of Belfast, which alone handles approximately 60% of Northern Ireland's trade. A report conducted by the Centre for Economics and Business Research (cebr) in 2007 concluded that 13% of NI's workforce are employed by businesses which trade through the Port or are based in the Harbour Estate. These businesses generate £3.8bn of Gross Value Added (or £4.2 billion worth of GDP) – 15.7% of the NI total.

Source; DRD.



Northern Ireland Offshore Wind and Marine Renewables SEA Environmental Report

Figure 11.1: Resource Zones

Legend

Resource Zones

- Tidal
- Wave
- Wind

Water depth (m)

- 10
- 20
- 30
- 50
- 100

- Land
- Northern Ireland 12nm limit

Not to be used for navigation

Date	Thursday, July 30, 2009 15:05:54	
Projection	Irish National Grid	
Spheroid	Airy	
Datum	TM65	
Data Source	UKHO digital data	
File Reference	J:\P1161\Mxd\SEA\Zones of Interest\.mxd Figure 11-1 - Resource Zones	
Checked	Produced By	Joanna Lester
	Reviewed By	Sally Holroyd

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ANNEX C

List of consultation questions and consultation criteria

Question on Chapter 2

Do you consider that the strategic economic benefits of renewables and other user users have been identified? If not, please tell us what should also be considered within this Strategic Action Plan.

Questions on Chapter 3

On the basis of the assessments carried out in the ER, do you agree with the overall results and proposed mitigation measures (paragraphs 11 -18).

If not, please tell us why Please note that the above is a resume of the extensive ER which contains the detailed analysis behind the overall results.

Questions on Chapter 4

Do you think that the proposed targets in paragraph 3 are appropriate? If not, what targets would be appropriate and why.

Do you agree with the range of actions identified to take forward within the SAP? If not, please state why and let us know how you would amend the actions or propose new, additional ones to help deliver the SAP.

Question on Chapter 5

Do you agree with the reporting, monitoring and evaluation proposals? If not, please state why and what alternatives you would propose.

Consultation Criteria

1. Formal consultation should take place at a stage when there is scope to influence the policy outcome.

2. Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.

3. Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.

4. Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.

5. Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.

6. Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.

7. Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

The complete code is available on the Department for Business Innovation and Skills web site address;

http://www.berr.gov.uk/files/file47158.pdf

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www.detini.gov.uk

Your views on this document are welcome.

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