Strategic Environmental Assessment consultation response for Draft Plan for Scottish Offshore Territorial Waters

Argyll Renewables Communities

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Argyll Renewables Communities responses to consultation questions

1. Does the mapping of exclusion zones, environmental issues, and technical issues provide a reasonable basis for modelling the options?

The mapping of exclusion zones, environmental issues and technical issues provides a starting point for modelling the options; however, there are important considerations that are currently excluded from the SEA process. The Environmental Report states that *'A prime function of this SEA is to produce a tool that facilitates development in a **sustainable** way'*[1].

Sustainable development has been defined in many ways, but the most frequently quoted definition is from Our Common Future, also known as the Brundtland Report[2]:

> *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:*
>
> *•the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and*
>
> *•the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."*

Scottish Government has identified sustainable development as a pivotal policy integral to their overall purpose - to focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. 'Choosing our future: Scotland's sustainable development strategy' published in 2005 set out the steps which Scottish Government would take to respond and deliver the shared priorities set out in the UK Framework for sustainable development. Current Government strategy still reflects this in the five strategic objectives including:

A Greener Scotland - improving Scotland's natural and built environment and the sustainable use and enjoyment of it - is one of the five strategic objectives that form part of the Government's National Performance Framework, which sets out high level targets, outcomes and indicators applicable across the public sector in Scotland.

The national outcomes most closely associated with the Greener strategic objective are:

[1] Marine Scotland (2010) *The Plan for Offshore Wind Energy in Scottish Territorial Waters, p8*
[2] World Commission on Environment and Development (WCED) (1987) *Our common future*, p. 43, Oxford University Press Oxford

- We value and enjoy our built and natural environment and protect it and enhance it for future generations
- We reduce the local and global environmental impact of our consumption and production
- We live in well-designed, sustainable places where we are able to access the amenities and services we need

The Government's Wealthier and Fairer strategic objective is to enable businesses and people to increase their wealth and allow more people to share fairly in that wealth. By making Scotland wealthier and fairer, the Scottish Government's objective is to: generate more opportunities to work; make Scotland a more attractive place to live, work and invest; and ensure that the benefits of increased national prosperity are shared fairly across Scotland.

The national outcomes of most relevance to the Wealthier and Fairer objective are:

- We live in a Scotland that is the most attractive place for doing business in Europe.
- We realise our full economic potential with more and better employment opportunities for our people.
- We take pride in a strong, fair and inclusive national identity.
- Our public services are high quality, continually improving, efficient and responsive to local people's needs.

This sustainable development approach (including the social and economic as well as the environmental) is further supported by the Marine (Scotland) Act 2010 which in regards to the national marine plan is concerned with the physical, environmental, social, cultural and economic characteristics of the Scottish marine area and of the living resources which the area supports[3].

One of the core principles of Scottish Planning Policy is as follows:

There should be a clear focus on the **quality of outcomes**, with due attention given to the sustainable use of land, good design and the protection and enhancement of the built environment.

In addition to this the Planning etc (Scotland) Act 2006 that development plans by planning authorities must be exercised with the objective of contributing to sustainable development.[4] However, Marine Scotland's Report on Social and Economic Objectives for a Scottish Marine Plan has noted that several inter-related visions for the marine environment in addition to the five principles of sustainable development[5] are leading to an inconsistent approach to sustainable development and in particular the setting of social and economic objectives[6].

This provides further indication that the SEA should assess the sustainability of the Draft Plan addressing all aspects of sustainability including the setting and integration of objectives for social, economic and the environment and not be constrained to technical and environmental.

[3] Scottish Government (2010) *Marine (Scotland) Act 2010*
[4] Scottish Government (2010) *Scottish Planning Policy*, February 2010
[5] Scottish Executive (2005) *Choosing Our Future*
[6] Scottish Government (2010) *Marine Scotland: Report on Social and Economic Objectives for a Scottish Marine Plan*

At present the SEA guidance and resulting Draft Plan assesses three aspects (Schedule 3) which might relate to the socio-economic aspects of sustainable development which are: Population, Human Health and the inter-relationship between the issues listed in Schedule 3. In the context of sustainable development objectives the assessment of the social and economic effects are insufficient especially in relation to the potential effect on the communities local to the offshore wind farm development options.

Proposal: In the context of the facilitation of development in a sustainable way, the national outcomes and the objectives of the Marine (Scotland) Act 2010 and Scottish Planning Policy it is proposed that the ***social*** *and the* ***economic*** *pillars of sustainable development are included in the SEA scope.*

2. Do you have any further technical or environmental information you think we should take into account as we refine the Draft Plan?

The SEA considers the full life cycle of the development including the preconstruction assessments, construction, operation and decommissioning. The SEA also recognises the importance of the connection of the wind farms to the national grid system but due to the early stages of wind farm design strengthening of the grid and marine interconnecters has not been assessed.

The potential impacts of grid connection through onshore facilities is also not subject to the SEA and will be decided on a project basis via local planning authorities rather than Marine Scotland.

This omission in the strategic environmental assessment of the grid infrastructure and the separate planning process is problematic because:

- SEA of the grid connection required for the options proposed could lead to alterations in the draft plan;
- The potential impacts of the grid infrastructure development onshore will require an environmental impact assessment the results of which may not be known until after planning has been consented for the offshore wind development;
- Consent for the offshore wind development may indicate that all associated development with that wind farm will be seen as a lesser consideration;
- The human health and population impacts may be of particular concern with the onshore developments and these will not have been considered as part of the SEA

Proposal: It is proposed in the refinement of the Draft Plan that grid connection and land-based facilities required for all phases of offshore wind farm developments are included in the scope of the SEA.

3. Do you consider that the Draft Plan presents a set of practical options?

The SEA provides recommendations for the Implementation of the Draft Plan on the basis that all 10 short term options could be progressed between 2010 and 2020. However, it is recognised that all short term options (with the exception of Kintyre) have the potential for in-combination effects on the environment, particularly with respect to biodiversity, visual receptors along the coastline, high sensitivity seascapes/landscapes (especially within 8km of proposed options), sediment

movement/coastal processes and other marine users (e.g fishing vessels and recreational users). These effects may be exacerbated by implementation of the medium term Plan[7].

The level of potential in-combination and cumulative effects for the Short Term Plan may cast doubt over the practicality of these ten options, especially in the light of a precautionary principle approach being taken. The opportunity and potential scale of development in Scottish Territorial Waters is huge and the Draft Plan provides the process to assess this strategically on a national basis for developments that will last 50 years or more. The Draft Plan must therefore consider the potential effect on alternative uses for these marine sites both now in the case of offshore wind and in the near future for less proven technologies such as marine and tidal. This may result in preserving areas such that a mix of renewable energy technologies is provided for both now and in the medium term.

Proposal: Further reference should be made to the Scottish Marine Renewables, SEA (2007) to integrate the assessment of both and include alternative uses and sites for marine energy developments and by doing so 'future proof' the practicality of the options proposed.

4. Should any options be removed from the Draft Plan?

It is not suggested that any options are removed at this stage; however, further assessment may indicate that this is advisable.

5. Are there other options we should consider in the medium or long term?

As discussed under Question 3 there is a need to take a more strategic approach to consider other marine based renewable technologies this should be considered for the medium and long term.

Both the Economic Strategy (2007) and SPP6 (2007) were introduced after the Environmental Assessment (Scotland) Act 2005. The drivers for better understanding of the social and economic impacts are not currently integrated with the SEA process and this should be done, possibly through an Amendment to the SEA to ensure appropriate consideration alongside the environmental and technical as a matter of urgency. However, it is noted that the Scottish Planning Policy (2010) which revokes SPP6 provides policy at a strategic level and has therefore not reinforced all aspects of SPP6.

Proposal: We would suggest the following:

- *The assessment of alternative uses and sites for marine energy developments*
- *the integration of the social and economic assessments in SEA (through an Amendment to the Act)*
- *the inclusion of the grid infrastructure and land based facilities within the Draft Plan.*

[7] Marine Scotland (2010*), Strategic Environmental Assessment (SEA) of the Draft Plan for Offshore Wind Energy in Scottish Territorial Waters: Environmental Report.* Volume 1, 9.4.1, p171

6. How can the Draft Plan be improved? What should be taken forward differently and why?

Consultation

The SEA process has formed an integral part of the preparation of the plan to ensure that the environmental considerations are incorporated within the decision making process and that ultimately offshore wind is sustainable.[8] However, as discussed above there is still limited consideration of the socio-economic factors under the sections of population and human health.

In addition to this the formal consultation does not include bodies such as National Health Scotland, Scottish Enterprise or Highlands and Islands Enterprise (HIE). In terms of population and human health it is suggested that National Health Scotland is consulted. Scottish Enterprise and HIE focus on the economic development of Scotland and as such understand the challenges of developing a sustainable economy.

Although the consultation period is open to all stakeholders and members of the public there has been no formal and structured consultation with coastal communities in the development of The Draft Plan. This could provide useful insight and also provide the opportunity for communities to be consulted prior to individual options moving forward. It is suggested that this is undertaken and feeds into the development of the medium and long term plans.

Proposals: We suggest that:

- *inclusion of the socio-economic factors under the sections of population and human health and appropriate formal consultees (NHS)*
- *inclusion of a formal consultee that is able to address socio-economic concerns (SE and HIE)*
- *pro-active structured community involvement and consultation*

Precautionary Principle

'In keeping with best practice the Precautionary Principle has been used throughout the assessment.' This has meant that where there is uncertainty or lack of information the 'worst case' has been assumed. The SEA considered how long effects might last, their likely scale and whether action is required to avoid or reduce them (mitigation). The SEA identified benefits as well as potential problems arising from the development (positive and negative effects).

In consideration of the depth of assessment of the social and economic impacts of the Draft Plan significant uncertainties may exist for example, in terms of number and type of jobs, impact on infrastructure, and local capacity to supply. It is possible that if the precautionary principle was applied the considerations for social and economic impact may have a much greater influence on the options proposed in the Draft Plan.

[8] Marine Scotland (2010), *Strategic Environmental Assessment (SEA) of the Draft Plan for Offshore Wind Energy in Scottish Territorial Waters: Non-Technical Summary*

Proposal

The precautionary principle has not been effectively applied to the assessment of the effects on Population and Human Health in relation to the potential impacts on jobs, infrastructure, visual amenity and culture for example. It is proposed that this is assessed in further detail such that the precautionary principle can be applied consistently across all aspects of sustainable development, social, economic and environmental.

Procurement

Scottish Government in Scottish Planning Policy 6 (SPP6) recommends that four stages are assessed; procurement, construction, operation and decommissioning. The procurement stage is omitted from the SEA. Although, Scottish Planning Policy (2010) does not currently reinforce this and provides the framework for onshore development it is suggested that this is reflected in the Final Plan. The procurement stage is critical in terms of the potential impact of wind farms on local communities and from a national economic growth perspective. How services are procured can influence the level of local economic benefit and the potential to maximise the economic benefits and minimise the economic impacts may be lost at this stage even if there were very positive intentions at the planning stage.

SPP6 requires procurement to be assessed in the planning application but it is suggested that this is included in the Final Plan to understand the impact at a national level of large scale development of the Scottish Territorial Waters.

Proposal: We suggest that, in line with planning policy, the procurement stage is included in the SEA and the Final Plan.

Integrated Assessment

The SEA approach has been developed over the last five years and provides a process by which plans and programmes can be assessed at a strategic level. However, this could be further strengthened by an Integrated Assessment approach to link in all the aspects to be considered.

Integrated assessment has been defined as,

> *Integrated assessment (IA) is a reflective and iterative participatory process that links knowledge (science) and action (policy) regarding complex global change issues such as acidification and climate change. IA can be defined as an interdisciplinary process of combining, interpreting and communicating knowledge from diverse scientific disciplines in such a way that the whole cause–effect chain of a problem can be evaluated from a synoptic perspective with two characteristics: (i) it should have added value compared to single disciplinary assessment; and (ii) it should provide useful information to decision makers (Rotmans and Dowlatabadi, 1997[9]).*

Social Performance

In the case of offshore wind there is the perceived geographical dislocation between the development site and the community boundary. Other offshore developments, in particular oil and gas, have in

[9] Jeroen P van der Sluijs, (2000) Encyclopaedia of Global Environmental Change , *Integrated Assessment, Definition of*,

some cases developed a 'social performance' approach to such developments the objectives of which include:

- avoid/and or minimise the negative impacts to local communities and stakeholders from operations
- optimise the positive opportunities to local communities and other stakeholders from operations
- undertake activities to contribute more broadly to the societies and communities where it operates.

There is a strong business case for a social performance approach which can create a 'win win' situation for example through, adding to the developer's credibility and 'license' to own and operate, reducing delays in the consenting process and operational issues, facilitating access to sources of private finance that now regularly consider environmental and social risks of projects in their analysis and enhanced reputation with the ability to operate in sensitive locations.

It has been found in the oil and gas sector that this approach can help secure both a regulatory and 'social' license to operate[10]. In the case of offshore wind farm development further research into social performance approaches and models of support, may provide a more sustainable way forward balancing the social, economic and environmental considerations.

The Final Plan should consider relevant studies and guidance such as the Performance Standards on Social and Environmental Sustainability (2007)[11] which explains the Performance Standards and expectations of the International Finance Cooperation (IFC). The variables considered include the host country context, the scale, complexity of projects and associated cost-benefit considerations. The IFC have also produced the Environmental, Health, and Safety Guidelines Wind Energy which provides best practice on various aspects of development such as the consultation with the community on the location of the wind farm to incorporate community values into design[12].

In line with global standards it should be noted that if the wind farm projects were being executed outside the OECD and financed by any of the commercial banks (such as Citi and Barclays) that are signatories to the Equator Principles (www.equatorprinciples.org) or by development banks including the European Investment Bank (EIB) they would require an environmental and a social assessment and management plan consistent with the requirements of the International Finance Corporation (IFC) Social and Environmental Performance Standards (IFC PS). The core of these standards is the requirement for a social and environmental assessment and management plan (Performance Standard 1). This must be consulted on locally, and a plan established for 'stakeholder engagement' throughout the project lifetime. In the scoping assessment, the applicability of each of seven specific standards should be identified. These standards address:

- labour and working conditions

[10] Orenstein et al (2010) *Case Study of an Integrated Assessment: Shell's North Field Test in Alberta, Canada. Impact Assessment and Project Appraisal, Volume 28, no 2, June 2010, page 147-157 (11).*

[11] International Finance Corporation (2007) Guidance Notes: Performance Standards on Social & Environmental Sustainability, July 31st 2007

[12] International Finance Corporation (2007) Environmental, Health, and Safety Guidelines Wind Energy

- pollution prevention and control
- community health, safety and security
- land acquisition and involuntary resettlement
- biodiversity and conservation of natural resources
- indigenous people
- cultural heritage.

For each standard, detailed requirements are set out.

Projects will not be accepted for financing until there is an assessment and management plan for the project lifetime (including de-commissioning) that meets the requirements, or an action plan to fill any gaps in meeting the standards, with a specific timetable for implementing the actions.

These standards focus on risks identification and mitigation; they do not include requirements for project benefits.

The specific things that would have to be covered in for example, Argyll, subject to these standards would be:

- impacts on fishing, tourism and any other livelihood impacts
- impacts on infrastructure
- management of the construction labour force (and in many cases, projects specify here what steps they will take to promote local employment).
- the assessment would need to take account of land and sea based impacts.[13]

This fits with the vision for Scotland's Seas suggested by Marine Scotland research for consideration;

> *'a clean, healthy, safe, productive and biologically diverse marine and coastal environment, which contributes to social, cultural, and economic well being and which is managed to meet the long-term needs of nature and people[14].'*

An integrated assessment and social performance approach would help to link up the three pillars of sustainable development and provide a balanced vision and robust framework to the development of Scottish Territorial Waters.

Proposal: Scotland has set ambitious climate change targets and is leading the way on many aspects of renewable energy development. There is an opportunity here to lead the way on meeting global standards in the development of Scottish Territorial Waters. The Final Plan should adopt an Integrated Assessment and a social performance approach at plan and option level. This could also address potential disparities of impact at community, local, and national level.

[13] In consultation with Jill Shankleman, June 2010
[14] Scottish Government (2010) *Marine Scotland: Report on Social and Economic Objectives for a Scottish Marine Plan*

7. Do you have views on the scale and pace of development that could be sustainably accommodated in STW, taking into account the findings from the SEA and the technical assessment?

The scale and pace of development offshore is moving faster than that of onshore grid connection and infrastructure improvements. This is concerning as the onshore developments will have an impact on the host communities (often in 'fragile' areas) but this will be decided later and separately from the offshore consent. This 'disconnect' of the two developments should be addressed and has already been discussed.

Proposal

It is proposed that both offshore and onshore developments relating to offshore wind farms are assessed together.

8. Have we got the balance right in the Draft Plan, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts?

The Draft Plan emphasises the requirement to tackle climate change and identifies options such as the Argyll Array as an important contributor to reducing carbon emissions as it provides the greatest area for wind generation where wind speeds are high.

The environmental impacts are dealt with in sufficient depth at strategic level on the basis of the requirements of the Environmental Assessment (Scotland) Act 2005. However, there is insufficient weight given to the economic development opportunities and commercial impact. This is in part due to the limited requirement for socio-economic assessment in the SEA Guidance. The economic strategy for Scotland and SPP6 (now superseded by the SPP) both produced since the Environmental Assessment (Scotland) Act provided a much stronger emphasis on economic activity and encourage due assessment alongside the environmental.

For example, as stipulated by the Scottish Government in Scottish Planning Policy 6 (SPP6).

> *'Applications should include details of the environmental, social and economic benefits that will arise from the project, both locally and nationally, including the overall number of jobs and economic activity associated with the procurement, construction and operation of the development. Planning authorities should consider whether any such benefits could or should be secured by way of a planning condition or planning agreement'*[15].

Proposal: It is proposed that as a matter of urgency the assessment of the commercial impact and the economic development opportunities are strengthened in terms of scope and methodology in order to meet the policy objectives but also to ensure that the potential for maximising economic development is not missed especially in the communities likely to be directly affected by the development. Consideration should be given to an obligation on developers to assist communities and local businesses to' up skill' and capacity build to become participants in the supply chain.

[15] Scottish Government (2007) *Scottish Planning Policy SPP 6 Renewable Energy*

9. The Plan, once implemented, will be reviewed to take account of actual development and increasing knowledge of development factors. How often should this be done and why?

It is suggested that the two year timescale is appropriate given the speed of development and understanding. However, it will be important to establish indicators at the outset so that appropriate data can be collected over this time frame. A good practice framework for the process of identifying marine social and economic objectives for Scottish Seas is being developed by Marine Scotland[16] and this should be integrated into the Final Plan.

Proposal: It is suggested that indicators are established at the outset so that appropriate data can be collected over the specified development time frame

10. The SEA has identified that there could be significant adverse effects, from the Draft Plan as a whole, on Scotland's landscapes and seascapes. Measures for the mitigation of these effects have been identified in the SEA environmental report. Do you have a view on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

The west coast of Scotland poses particular challenges to the mitigation of visual impact due to the intricate arrangement of islands and mainland and the interchange of views between them. Views from ferries are also very important in Scotland particularly on the west coast and due to the number of islands and intricacy of coastline one ferry journey can provide many varied and changing views and compositions[17].

Seascape effects are the changes in the character and quality of the seascape as a result of development. Hence seascape assessment is concerned with direct and indirect effects upon specific seascape elements and features; more subtle effects on seascape character; and effects upon acknowledged special interests such as designated landscapes for their scenery, wildness or tranquillity.

Additional mitigation measures could include:

- Reducing the number of turbines
- Setting a proximity to land boundary
- Development and implementation on agreed guidance to pylon lighting and its visual impact (night and day on moving objects)

Any degradation in landscape and seascape quality may impact on the tourist industry and on recreational users. High quality vistas, views to the sea and appreciation of natural heritage all form an important part of Scotland's national tourism product. It is suggested that some further research considered here to understand the value that is placed on the experience of landscape and seascape such as Olivia Wolley, Trouble on the Horizon? Addressing Place-based Values in Planning for Offshore Wind Energy (Oxford University Press).

[16] Scottish Government; (2010) *Marine Scotland: Report on Social and Economic Objectives for a Scottish Marine Plan*

[17] Scott, K.E., Anderson, C., Dunsford, H., Benson, J.F. and MacFarlane, R. (2005). An assessment of the sensitivity and capacity of the Scottish seascape in relation to offshore windfarms. Scottish Natural Heritage Commissioned Report No.103 (ROAME No. F03AA06)

11. Do you have any other views on the findings of the SEA? do you think that all the environmental effects (positive and negative) have been identified? Are there other issues that we should be taking into account in the preparation of the Draft Plan?

Noise

In addition to the matters raised above the question of potential noise impact should be explored further at a strategic level. Whilst the noise impact of onshore wind farms is well understood there is limited experience of those offshore. The scale of the wind farms in terms of number and size of turbines; the positioning offshore at sea level, the prevailing wind direction and the possibility of noise being transmitted within laminar wind flow could result in a greater impact than that experienced to date. In finalising The Draft Plan evidence of existing research and understanding of noise effects should be provided.

Proposal: The Final Plan should identify current evidence of the likely noise effects of offshore wind farms.

Scale

The Short Term Plan identifies 10 short term options to be progressed. The scale of these developments is significant in the case of the three Argyll projects total investment is in the region of £7-9 billion. Even a small proportion of this investment could bring significantly beneficial effects to the local communities.

Scottish Planning Policy (2010) refers to the development plan promoting a more sustainable pattern of growth for an area, taking account of the scale and type of development pressure and the need for growth and regeneration. It states that the most effective way to plan for change will depend on many factors, including geography, environmental sensitivities, landscape character and infrastructure capacity.[18] The development of offshore wind farms will in most cases require some onshore development, housing of construction workers and infrastructure requirements. The need to plan for this change and the appropriate scale of change is essential if a sustainable pattern of growth is to be achieved. The purpose of the marine planning system is to provide a framework for the sustainable development of the marine area, setting economic, social and marine ecosystem objectives and providing a framework for decision making. The issue of scale should be assessed in terms of both positive and negative effects and reflected in the Final Plan.

Proposal: The scale of the proposed wind farms and the potential onshore developments are of a scale that will have significant positive or negative effects. This should be addressed in the Final Plan.

[18] Scottish Government (2010) *Scottish Planning Policy*, February 2010

12. The Draft Plan has identified environmental and technical issues in the north and north west regions of Scotland, in particular. It may therefore be reasonable to give further consideration to these regions. Do you think that development in these or other regions, or individual options within them, should be given lower priority or perhaps deferred to the longer term?

Good environmental decisions are based on sound science and information; if this is not available the SEA recommends a precautionary approach should be taken. Further considerations to the **west**, north and north west regions would be welcome and may mean deferring their development until more is known. Monitoring the impacts of those options that do progress is essential to gather appropriate data to analyse and consider in relation to these regions.

Proposal: The Short Term Plan is ambitious and should be progressed with care. A monitoring and evaluation strategy should be prepared and implemented. If further consideration is required individual options should be deferred in order for these considerations to be completed.