

MARINE SCOTLAND POLICY DEVELOPMENT FOR MARINE RENEWABLES AND OFFSHORE WIND COVERING MARINE PLANNING AND LICENSING

Introduction

- The Scottish Government has a stated target of meeting 100% of Scottish demand for electricity from renewable sources by 2020.
- The Scottish Government is firmly committed to the development of a successful and sustainable offshore renewable energy industry in Scotland.
- Sectoral Marine Plans are being developed to ensure that Offshore Renewable Energy sources, wave, tidal and offshore wind, will make a full contribution to meeting our ambitious targets. Sectoral marine plans will be adopted into the statutory National and Regional Marine Plans.
- Scotland is well placed to take a global lead in the exploitation of renewable energy sources at sea. Scotland has a massive offshore renewables potential with an estimated 25% of Europe's tidal resource, 25% of its offshore wind resource and 10% of its wave potential.
- The Scottish Government recognises that offshore renewable energy represents a huge opportunity for Scotland to create new industries and to make great progress towards achieving our ambitious renewable energy targets.
- We also recognise that there are a range of issues which have to be addressed to allow the establishment of any new sector. To address the various issues and challenges of developing offshore renewables the Scottish Government has initiated a number of projects to provide solutions and support to partner organisations and Industry.
- The UK and Scottish Marine legislation has been used to deliver a Marine Planning System and introduce best practice through efficiencies in licensing and consenting processes.
- Scottish Ministers have started the process of implementing the streamlining of marine licensing and are taking forward secondary legislation within the Scottish Parliament.
- Marine Scotland has taken forward a range of initiatives to deliver on Scottish Ministers commitments on marine renewables through the development of marine planning (including national, regional and sectoral) and efficient licensing and consenting processes, as set out below.

Background

- To develop best practice to help facilitate Marine Renewables development Marine Scotland established a partnership group, the Marine Energy Spatial Planning Group (MESPG), with SNH, the enterprise network, Scottish Renewables, the Crown Estate Commissioners and DG Energy in December 2008.
- The Group worked on a remit consisting of the following themes:
 - Sectoral Marine Planning
 - Efficient Licensing
 - Addressing Environmental Impact Unknowns
 - Regional Initiatives
- On Sectoral Marine Planning the Group established a project to produce an Offshore Wind Sectoral Marine Plan through the use of Strategic Environmental Assessment, Socio-economic Assessment, strategic Habitat Regulation Appraisal and Statutory Consultation Analysis.
- Efficient Licensing is been delivered through 4 main initiatives:
 - The establishment of a one stop shop covering marine licensing. (MS LOT)
 - The production of a Licensing Manual. (Initially covering marine renewables but under review to cover offshore wind also.)
 - Development of Licensing Policy Guidance (Initially covering Survey, Deploy and Monitor but being expanded to cover other issues including the Rochdale Envelope etc.)
 - SNH Monitoring Protocol (A draft document to advise developers on pre development survey and post development monitoring techniques has been posted on the SNH web site.)
- A research sub group was set up to examine issues related to marine renewables devices potential impacts on the marine ecosystem. (This sub group continues to operate and manage a range of projects.)
- Regional Initiatives include the development of a Regional Marine Plan Framework and Regional Locational Guidance for the Pentland Firth and Orkney Waters. A 3 stage approach was developed and stage 1 reports produced, Stage 2 consists of collecting better regional data and studies to map and evaluate inshore fishing activity and shipping activity are on going. Regional Locational Guidance has been developed to encourage further marine renewable development around Scotland to facilitate competition for The Saltire Prize. Regional Locational Guidance has a role in Marine Licensing and is now used to identify Sectoral Marine Plan options.
- Although work on these themes continues and a number of outputs/models have been developed and continue to be refined, the MESPG was closed down after 12 months.

OFFSHORE WIND

SECTORAL MARINE PLAN FOR OFFSHORE WIND ENERGY

- *Blue Seas – Green Energy: A Sectoral Marine Plan for Offshore Wind Energy in Scottish Territorial Waters* was published along with its associated Post Adoption Statement on the Scottish Government website on 18 March 2011.

<http://www.scotland.gov.uk/Topics/marine/marineenergy/wind>

- The Plan sets out the Scottish Government's policies for developing offshore wind energy up to and beyond 2020. It has been developed using Strategic Environmental Assessment (SEA), Habitats Regulations Appraisal (HRA) and consultation and informed by socio-economic impact at the strategic level using Scotland's Marine Atlas as the main data source.
- The Plan identifies 6 areas for development in the short term (by 2020) and 25 medium term (beyond 2020) areas of search. The short term areas in total could deliver up to 5 Giga Watts of electricity, they are:
 - Argyll Array (off Tiree)
 - Islay
 - Inch Cape
 - Neart na Gaoithe
 - Forth Array
 - Beatrice (Moray Firth)

Plan Implementation

- Marine Scotland will manage the review and implementation of the Plan and will ask the Marine Strategy Forum (Marine Scotland's main consultee forum consisting of statutory, sectoral and NGO bodies with an interest in Scottish marine waters) to provide a strategic overview on the way forward.
- Project specific work will be managed again by Marine Scotland and the Marine Strategy Forum membership bodies will be asked to help steer the projects through involvement in advisory groups. Output and assessment reports will be subject to public consultation procedures which meet best practice standards. Consultation analysis will be undertaken and reports published to ensure that consultees can check their views and responses have been reported upon and taken into account.
- We will seek to consider issues at the regional and national level, within sectoral marine plans, to help facilitate linkages to marine licensing and other marine planning processes such as the National and Regional Marine Plans.
- Implementation includes the establishment of a strategic monitoring network and will include the application of further marine planning techniques to develop Plan options out to the 200 nm limit.
- Marine Scotland will therefore undertake Plan scoping using the MaRS model and regional locational guidance, to identify Plan options and facilitate future lease bidding and better inform the licence application process.

- The Plan will be reviewed over a 2 year period and the scope of the Plan expanded beyond STWs out to the 200 nautical mile Renewable Energy Zone limit. The outcomes of the Key Actions (Section A.12 of the current Sectoral Marine Plan) will feed into the review process. Any options or areas of search arising from the Scoping exercise, Regional Locational Guidance or any future leasing round, which are contained in the review will be subject to Sustainability Appraisal including SEA, Socio-economic Assessment, HRA and statutory consultation.

WAVE AND TIDAL

SECTORAL MARINE PLAN FOR WAVE AND TIDAL ENERGY

- In 2007, the Scottish Government published a Strategic Environmental Assessment (SEA) for Marine Renewables covering Scottish Territorial Waters for our West and North Coasts. The report concluded that there is significant resource within Scottish territorial waters for wave and tidal energy development. <http://www.scotland.gov.uk/Publications/2007/03/seawave>
- Work is progressing on the Marine Renewables Sectoral Plan which requires Sustainability Appraisal in line with the requirements of the Marine legislation. This work will refresh the 2007 SEA and increase the geographic scope to include Scotland's renewable energy zone (out to 200 nm's). Sustainability Appraisal includes SEA, strategic HRA, Socio-economic Impact Assessment and consultation.
- An Initial Plan Framework will be produced which will draw upon the original SEA, Scoping and Regional Locational Guidance for The Saltire Prize and Regional Locational Guidance for the Pentland Firth Strategic Area. Additional scoping work will be undertaken using the MaRS model to map resource and constraint areas covering the Scottish renewable energy zone to develop further Plan options. Regional Locational Guidance review and application will be applied to the areas identified to produce refined Plan options and these will be reported within an Initial Plan Framework. Sustainability Appraisal will be applied to produce a Draft Plan and will be subject to statutory public consultation.
- The Plan will provide clear guidance to Industry on where to focus investment and pursue development opportunities.

PILOT MARINE SPATIAL PLAN IN PENTLAND FIRTH AND ORKNEY WATERS

- 11 leases have been awarded in the Pentland Firth and Orkney Waters for wave and tidal projects, with a total potential capacity of 1.6 GW.
- An initial Marine Spatial Plan (MSP) Framework and draft Regional Locational Guidance have been published on the Scottish Government website which sets out a 3 stage process for the development of regional marine plans and Regional Locational Guidance for wave and tidal development in the Pentland Firth and Orkney Waters area.

<http://www.scotland.gov.uk/Topics/marine/marineenergy/wave/rlg/pentlandorkney>

- The purpose of the Plan is to inform use of the sea, in a manner which minimises conflict between marine users and allows for wider marine management, including protection of the marine environment.
- The Framework document contains a summary of existing information on different uses of the seas, shows how these different uses may impact on each other, makes recommendations for future research to ensure that the Plan is properly underpinned by relevant and good quality information, and sets out how the Plan will be developed.
- Stage 2 of this work, currently underway, consists of commissioning a set of studies to fill the identified gaps in knowledge, to determine the likely interaction between future renewables activities and other sectors, as well as the potential environmental effects of the new technologies proposed. In particular, an inshore fishing study pilot is being undertaken to spatially analyse fishing activity around Scotland, targeted at smaller inshore vessels (under 15m in length).

SIMPLIFIED MARINE LICENSING

- To help address the challenges of developing offshore renewables, Marine Scotland has taken steps towards delivering a simplified licensing system, which aims to be transparent, efficient and proportional.
- In April 2011 Marine Scotland initiated a one-stop-shop for offshore wind, wave and tidal developers to obtain consents/licences for marine renewable developments in Scottish waters. This creates a simpler, more streamlined process to handle marine/offshore energy development applications and aims to reduce some of the burden for applicants and regulators alike.
- The implementation of the 'one stop shop' is an opportunity to do things better and more sympathetically. It provides a holistic consenting regime and promotes a close working relationship with consulting bodies – e.g. running s36 and Marine Licence applications simultaneously. It allows public participation, opportunities to comment and provides a mechanism to manage enquiries and interaction with applicants, stakeholders and public. A flow chart detailing the licensing process is at Annex A.
- Marine Scotland aims to provide a decision on all applications within 9 months (where no Public Local Inquiry is called).

Licensing Manual

- A Marine Renewables Licensing Manual, providing information and guidance to developers on the licensing process, is available on the Scottish Government website. Work is underway to update and incorporate offshore wind licensing elements, policy guidance and licensing policy created by the Marine Act into the manual.

<http://www.scotland.gov.uk/Topics/marine/Licensing/marine/LicensingManual>

Licensing Policy Guidance

○ **Survey, Deploy and Monitor Policy**

- The Survey, Deploy and Monitor Policy aims to provide a risk-based approach to help address uncertainties in licensing for offshore renewables development, taking into consideration environmental sensitivity, device type and scale of development. A draft version of the policy is available on the Scottish Government website and is being trialled by MS LOT.

<http://www.scotland.gov.uk/Topics/marine/Licensing/marine/sdm>

○ **Demonstration Strategy**

- The renewables demonstration strategy is a component of the Marine Scotland approach to reducing the environmental uncertainty currently inherent in the licensing of renewables developments in Scottish waters. Information, beyond the monitoring which would be required of the developer as consent conditions, will be obtained and used to inform the licensing/consenting of future developments.
- Marine Scotland will, in agreement with developers taking forward initial array developments, use consented projects to gather strategic information into how marine devices interact with the wider ecosystem. Priority for demonstration strategy investigations will be given to those interactions which are relevant to features of the environment that may be designated under EU (or national) legislation, i.e. seabed habitats, seabirds, marine mammals (seals and cetaceans), and migratory fish (primarily salmonids).

○ **Deemed Planning**

- Work is being undertaken to look at amending primary legislation (the Town and Country Planning (Scotland) Act 1997) using Parliamentary Order Process to allow Scottish Ministers the authority to grant deemed planning permission for onshore ancillary works related to offshore/marine energy development.

○ **Rochdale Envelope**

- Work is underway in consultation with the marine offshore renewables industry and other stakeholders to produce Scottish Government licensing policy guidance on the application of the Rochdale Envelope approach.
- The 'Rochdale Envelope' is an approach which tries to address some of the issues associated with projects where there are uncertainties over the final details of a proposed development, while ensuring compliance with environmental legislation. These uncertainties could include scale, type of device, elements and dimensions of the device and/or other factors, if there remain limitations in the amount of detail that is available on the project at the time at which consent is being sought.

SUPPORTING INITIATIVES

Scenario mapping

- Marine Scotland is working with Argyll and Bute Council to promote developer community engagement to examine and better understand of any potential onshore implications associated with the proposed Argyll Array offshore wind

farm (off Tiree). This approach involves the participation of key partner organisations - Argyll & Bute Council, The Crown Estate, SG Planning Team, Tiree Community Trust, Highlands and Islands Enterprise and Scottish Power Renewables (the developer).

- Following a tendering exercise, specialist Environmental Consultants Ironside Farrar have been appointed to take forward a study, the aim of which is to understand the practical scenarios for onshore development associated with the Argyll Array and develop proposals which would make the development acceptable to both the community and developer.
- Engagement with the community and key stakeholders will be at the heart of the process, with consultation planned throughout the study period.

Seabed mapping and Sediment Profiling

- Marine Scotland, working with other organisations, is taking forward the seabed mapping and Sediment Profiling of the Scottish Marine Area. Through a signed Memorandum of Understanding, Marine Scotland will work with the Northern Lighthouse Board to collect the bathymetric data in collaboration with the Maritime Coastguard Agency.
- As part of Marine Scotland's programme of work related to the development of offshore wind, wave and tidal activities, Scottish Renewables has identified a need for mapping and profiling to be prioritised in areas of proposed development. The resultant mapping and profiling information will assist developers and regulators assess the characteristics and ecological value of the sea bed in relation to renewable energy development of wave and tidal resources.

Marine Scotland Interactive (MSI)

- At the heart of the Marine (Scotland) Act 2010 are measures to address marine planning, licensing, offshore renewable energy, conservation and enforcement. Marine planning will be integral to establishing a statutory process to manage, through a strategic framework, the sustainable development of Scotland's marine resources and environments. The development of marine plans will provide a more transparent decision making process, reducing uncertainty for marine developers and encourage greater stakeholder engagement.
- Marine Scotland Science (MSS) contributes to the planning of the marine energy industries by providing regional datasets from strategically important areas around Scotland. The aim of the survey work is to provide clear guidance for marine planners and the renewable industry in supporting site identification and helping to focus R&D effort in order to accommodate the dominant seabed conditions found from priority areas identified by marine planning work and prioritised by developers through Scottish Renewables. Benthic conservation interests have also been addressed that may impede or preclude the development of the selected areas under current legislation.
- Marine Scotland Interactive is a new web based resource hosted on the Scottish Government website providing access to complex spatial data such as map

based information, geodatabases, video footage and digital stills held by MSS. Data are stored as themes and related datasets to support key areas of the Marine Scotland Act (2009). The themes address information related to offshore renewables, marine spatial planning and marine licensing. Datasets collate information into natural groups such as video-footage and bathymetry data. All data on the MSI web pages can be downloaded for free in a number of formats (.kmz, .lpx, .sd, .gdb and .csv) that can be viewed using free and intuitive software available on the internet such as Google Earth and ESRI Arc Desktop Explorer, coupled to social networking sites such as YouTube and Picasa. The same file formats can also be viewed using industry standard software.

- The survey work hosted on MSI comprises almost 600 km² of sea bed bathymetry data, over 400 seabed TV tows and several thousand digital still images. Map based datasets available include bathymetry layers and derived seabed information layers such as gradient, rugosity, gradient direction and shaded relief. Combinations of map based layers have been captured in geodatabases that can be queried according to parameters (depth, seabed gradient and distance offshore) that would influence site location development based on the requirements of the renewables devices and the equipment for their deployment. Map based summaries of reports based on the seabed video footage and digital stills are available providing information on the seabed type, biota and biotope for each TV tow.

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive>

<http://www.youtube.com/user/MarineLaboratory>

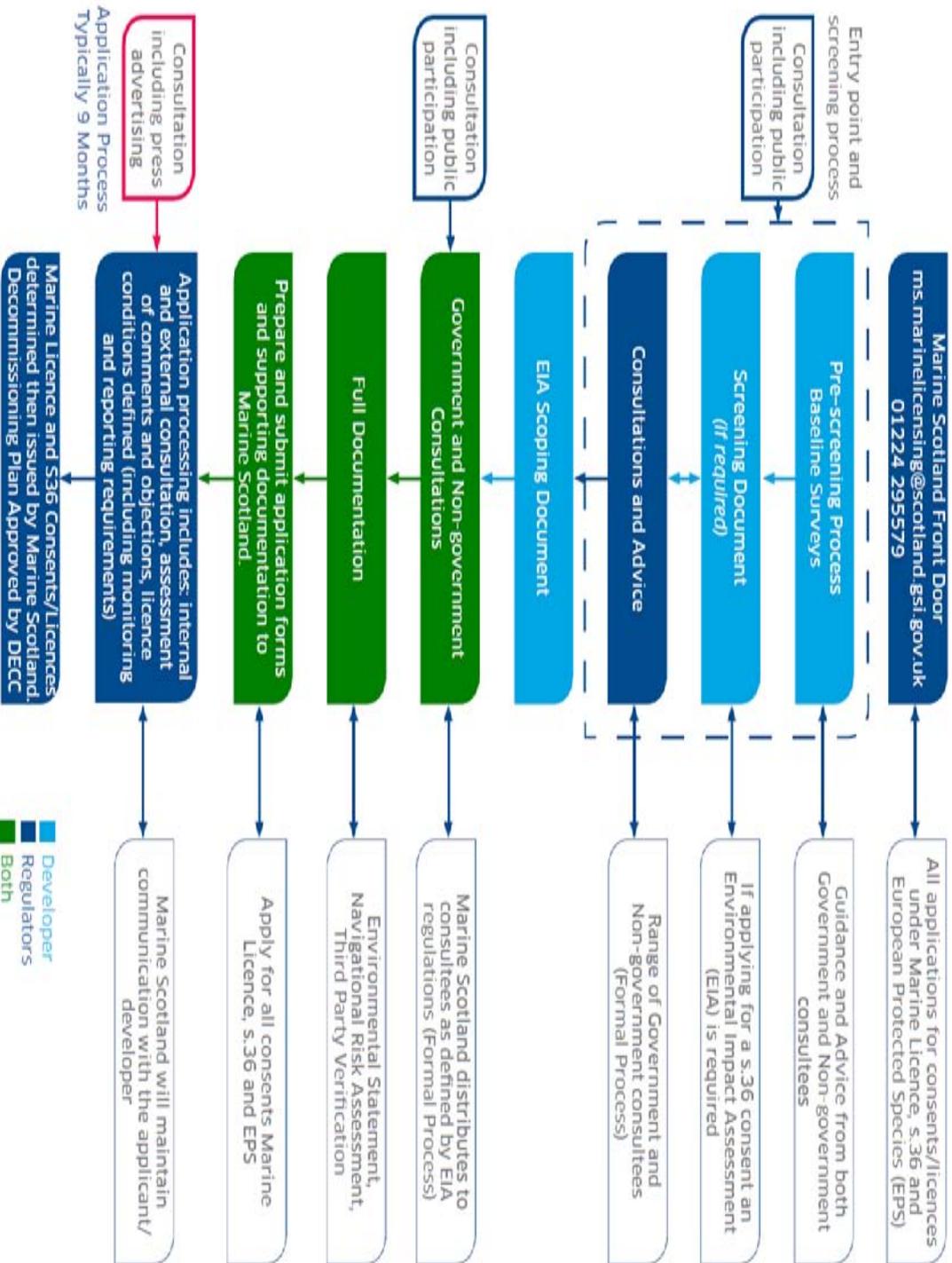
<http://picasaweb.google.com/MarineLaboratory>

Research Implementation Strategy

- A Research Implementation Strategy has been established to address the various gaps in current knowledge that have been identified through the ongoing programme of work that Marine Scotland is delivering to support the development of offshore renewable energy in Scotland's seas. We will continue to build this research strategy to cover issues and develop solutions when problems are identified which may inhibit development. •

<http://www.scotland.gov.uk/Topics/marine/marineenergy/ris>

Renewable Consenting Process – April 2011



Annex B

