OFFSHORE RENEWABLE ENERGY STRATEGIC ACTION PLAN (ORESAP) 2012-2020

PROGRESS REPORT 1 APRIL 2018 TO 31 MARCH 2019

Introduction

- 1. Chapter 5, paragraph 3 of the Offshore Renewable Energy Strategic Action Plan (ORESAP) 2012-2020 commits the Department for Enterprise Trade and Investment (DETI) now the Department for the Economy (DfE) to produce an annual report on progress against the actions within the ORESAP.
- 2. To date three reports have been published, the first covering the period March 2012 to September 2013, the second covering the period October 2013 to March 2016 and, the third covering the period 1 April 2016 to 31 March 2018. The previous reports can be found at https://www.economy-ni.gov.uk/publications/oresap-progress-reports.
- 3. The purpose of this (fourth) report is to cover progress made in the period April 2018 to March 2019.

Actions	Action Status
Publish SEA Post Adoption Statement	Action Completed. The Strategic Environmental Assessment (SEA) Post Adoption Statement was published in July 2012 and is available on request from the Department for the Economy along with all the other SEA related documents.
Continue to work closely with The Crown Estate (TCE) to ensure the optimum benefits for Northern Ireland through successful offshore renewable energy leasing in Northern Ireland waters.	Ongoing. Since TCE awarded development rights in October 2012 to one offshore wind and two tidal projects, all three had been working closely with The Department for Agriculture, Environment and Rural Affairs (DAERA), DfE, TCE and other stakeholders through the Environmental Impact Assessment (EIA) process.
	In December 2014, First Flight Wind ¹ , the consortium involved in the offshore wind project off the County Down coast, announced that it had taken the commercial decision not to proceed. TCE confirmed that with the withdrawal of this project, the Offshore Wind Resource Zone off the east coast of Northern Ireland no longer held any formal status and the re-leasing of this area was not envisaged in the short to medium term.
	Fairhead Tidal Array DP Marine Energy on behalf of Fair Head Tidal Energy Park Ltd ² submitted a marine licence application for the proposed development of a 100MW tidal array off the Antrim coast at Fairhead in January 2017. Following a statutory 42 day public consultation, DAERA has assessed the consultation responses, and is in the final stages of drafting a marine licence. If a licence is granted, this will open the way for DfE to consider an application for consent to construct and operate a generating station under Article 39 of The Electricity (Northern Ireland) Order 1992. The determination of the marine licence has been impacted during 2018-19 by the Buick decision which created uncertainty as to whether civil servants could take decisions on strategic infrastructure projects during a period of Executive formation. The position has now been clarified through the Senior Decision Making Forum under the Northern Ireland (Executive Formation and Exercise of Functions) Act 2018. The public consultation on the marine licence has raised some fundamental issues around the landfall of the cable and seascape / landscape issues around surface piercing technology and the requisite electricity substation. DAERA has written to Fairhead Tidal on these issues and a reply has been received indicating possible

 ¹ First Flight Wind Ltd was a consortium comprising B9 Energy, RES and DONG Energy (now Ørsted)
 ² Fair Head Tidal Energy Park Limited is a Special Purpose Vehicle established to develop the Fair Head tidal energy site. The SPV is jointly owned by DP Marine Energy Ltd and Bluepower NV.

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	changes to the original proposal which would address these concerns. However, a revised marine licence application will be required to reflect the proposed changes. This has yet to be received.
	Torr Head Tidal Array A marine licence was issued to Tidal Ventures Ltd ³ in December 2016 and a DAERA-led science group was to oversee the implementation of the licence and the project's environmental management. The project subsequently received Article 39 consent from DfE in June 2017. Tidal Ventures Ltd was dissolved on 8 January 2019. The Company had proposed to use Open Hydro Ltd technology which is currently in liquidation. The status of the marine licence and Article 39 consent in these circumstances is not clear. As a result, DAERA and DfE are currently considering their options.
	Wider Issues DfE and DAERA continue to liaise with TCE on the latter's ongoing policy development for offshore renewable energy commercial and test/demonstration opportunities across the UK. Throughout 2018, this focused on the potential for NI to participate in a further seabed leasing round in UK waters in 2019, information on which can be found at <u>https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/energy/offshore-wind- potential-new-leasing/</u> . Unfortunately, following extensive characterisation modelling, NI waters have been excluded from leasing round proposals on this occasion.
	The modelling found that there were significant challenges which, even with mitigation, mean that the conditions are not yet right for fixed foundation offshore wind development around NI's coastline. The primary criteria used to assess this suitability is that 99 per cent of the NI characterisation area (as defined by The Crown Estate work) is within 13km of the coast and is therefore constrained by risk and uncertainty associated with visual sensitivity from shore. Other challenges assessed in refining regions included Ministry of Defence activity; and high density shipping activity (traffic of more than 1000 ships per year).
	This does not mean that offshore wind developments cannot be taken forward in NI waters in

³ Tidal Ventures Ltd was a joint venture between Brookfield Renewable and OpenHyrdo (a DCNS company) to deliver a tidal array project at Torr Head, Antrim

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	the future, particularly given the significant advances that are being made in terms of alternative technologies e.g. floating wind platforms.
	DfE officials will continue to work closely with their TCE colleagues to ensure that NI remains fully engaged and is a consideration for any future development opportunities.
Actions arising from the Strategic Environmental Assessment and Habitats Regulations Appraisal (i) consider a cross departmental approach to filling strategic data and knowledge gaps	Action Completed. DAERA completed a gap analysis. Many of the identified gaps have now been filled at project level through the EIA process and so many of the gaps and knowledge identified at SEA stage have now been filled through EIAs in both Northern Ireland, and through the Scottish MEYGEN tidal array ⁴ .
and increasing the collection and availability and accessibility of current data sets.	In addition, TCE, the UK Department for Business, Energy and Industrial Strategy (BEIS) and Marine Scotland ⁵ are taking forward a key strategic research programme to de-risk the consenting of UK-wide offshore wind projects through the Offshore Renewable Joint Industry Programme (ORJIP) ⁶ , on which DAERA is represented (and to which DfE is an observer). The work is focussed around four projects examining bird collision risk and avoidance rate monitoring; population consequences of acoustic disturbance; underwater noise mitigation technologies and measures. DAERA is also represented on ORJIP Ocean Energy which focuses on wave and tidal research (again, DfE has observer status to this group).
(ii)promote proposals for the adoption of a " <u>deploy and monitor</u> " <u>approach</u> to the deployment of commercial scale development on a phased approach, to increase	Action Completed . DAERA has pioneered the 'survey, deploy and monitor' strategy through the MCT SeaGen tidal device in Strangford Lough, which was granted a marine licence in 2008. This approach was at the forefront of marine renewable device technology but is likely no longer required. This is because the information from both Seagen and Meygen mean there is
knowledge of possible impacts as well as building on information from other developments such as those being deployed in the Pentland Firth.	much more information available on how marine species interact with tidal technology. SeaGen in Strangford Lough was decommissioned during March – May 2019. This was subject to a full marine licensing process.

⁴ The Meygen Tidal Stream project is located between the northernmost coast of Scotland and the Island of Storma and is being taken forward by developer Atlantis Resources Ltd

⁵ Marine Scotland is responsible for the integrated management of Scotland's seas.

⁶ ORJIP is a UK-wide collaborative programme of environmental research with the aim of reducing consenting risks for offshore wind and marine energy projects. Currently there are two ORJIP streams: <u>Offshore Wind</u> and <u>Ocean Energy</u>.

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(iii) develop a Project Level Mitigation Strategy to ensure that the necessary mitigating actions, as identified in the Environmental Report and the HRA are satisfactorily considered and addressed as individual projects come forward.	Action Completed A Project Level Mitigation is incorporated into the Marine Licences.
Work with NIE, the System Operator (SONI) and the Utility Regulator of Northern Ireland (UREGNI) to facilitate the development of the NI Grid to handle the increasing renewable electricity generated offshore.	Ongoing. The NI Authority for Utility Regulation (NIAUR) published the outcome of its offshore connection consultation in December 2013 and, in October 2014, NIE/SONI confirmed that offshore renewable energy developers could apply for grid connection on foot of agreement for lease / development rights from TCE, rather than having to await onshore planning permission. The Regulator has also set up an operationally focussed group (Renewables Grid Liaison Group ⁷) considering grid matters which includes the NI Renewables Industry Group, NIE and SONI and which DfE attends in an observer capacity.
	In 2011 Eirgrid (which has owned SONI since 2009) launched the DS3 (Delivering a Secure, Sustainable Electricity System) Programme the aim of which is to meet the challenges of operating the electricity system in a secure manner while achieving the 2020 renewable electricity targets for Ireland and Northern Ireland. The DS3 Programme is designed to ensure that Eirgrid/SONI can securely operate the power system with increasing amounts of variable non-synchronous renewable generation over the coming years. Achieving this level of renewable integration on a synchronous system is unprecedented and presents significant challenges for the real-time operation of the power system.
	So far the DS3 programme has enabled EirGrid/SONI to increase levels of renewable generation possible on the system at any given time from 50% to 65%, with the aim of increasing this incrementally to 75% over the coming years.
	Between 31 January and 9 March 2018, SONI and NIE Networks issued a joint consultation document on connecting further electricity generation in Northern Ireland. This included exploration of how further connection offers might be made in the future i.e. by adopting more innovative approaches rather than traditional network investment. The outcomes of that

⁷ https://www.uregni.gov.uk/renewables-grid-liaison-group

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	consultation formed the basis of a next steps paper which was issued in June 2018 and set out the Terms of Reference for establishing a Connections Innovation Working Group which aims to find solutions that facilitate the connection of further Distributed Energy Resources (DER Generation & Storage) in Northern Ireland, which are technically and commercially feasible for the Network and System Operators and for DER developers/operators of both new and existing projects. The work of this group is ongoing.
Consider, with Scotland and the Republic of Ireland, the initial findings of the joint Isles Project to assess the potential for an offshore regional marine electricity grid linking Ireland and Scotland.	Action Completed The first phase of the ISLES (Irish-Scottish Links on Energy Study) project, in April 2012, concluded that a cross-jurisdictional, offshore, integrated network is feasible, under certain circumstances, and recommended a second project to achieve further action 'towards implementation'. "ISLES II" received INTERREG IVA funding in 2013 and involved three distinct work-streams: the Spatial Plan, the Network Regulation and Market Alignment Study and the Business Plan.
	The purpose of the project was not to commission any generation/construction projects but to undertake environmental studies, identify regulatory issues for potential investors and provide information that would prove useful in the event of developer interest. The project was delivered successfully in June 2015. Copies of the reports are available at the dedicated project website: <u>http://www.islesproject.eu/isles-ii/</u> .
	A third phase of the project was informally proposed but lost momentum when NI's only offshore wind project was discontinued and no other "anchor" projects expressed an interest in NI or the other jurisdictions.
	The findings of the ISLES project have been fed into the discussions at British-Irish Council (BIC) Energy Sector Working Group meetings which includes representatives from NI, Ireland, Scotland, Guernsey, Jersey, the Isle of Man, the UK and Wales. Some of these jurisdictions have potential investors conducting feasibility studies into marine energy sources (tidal) and offshore wind and the group is exploring any areas with potential for collaboration between jurisdictions.
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	Ongoing . Invest NI continue to promote supply chain opportunities in the offshore renewable sector to individual companies and collaborative networks and also through the Local Economic Development measure with local councils. It also continues to work with the Department for International Trade (DIT) to promote the UK as a location for offshore wind

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supply chain business in relation to projects considering investment in NI waters and also in the wider international and national market	investment and Invest NI's London-based office remains active in encouraging construction related opportunities in the renewables sector. Ongoing liaison is taking place with Belfast Harbour in relation to potential sites to service Irish Sea Wind Farms.
	Some notable highlights on supply chain development included:
	Harland & Wolff (H&W) Assembly of 18 jacket components as part of ScottishPower Renewables' £2.5 billion East Anglia ONE project in the North Sea. The project is now nearing completion.
	Sea Source Offshore Sea Source Offshore is the 'Offshore Services Division' of the Sea Source Group – a fishermen's co-operative, based in Kilkeel, Northern Ireland. This co-operative has successfully diversified into the Offshore Wind Sector servicing windfarm developments in the Irish Sea and beyond. It provides a range of services including Marine Asset Protection, Technical Solutions and Environmental observation as well as collection of key marine data.
	Centre for Advanced Sustainable Energy (CASE) CASE ⁸ , supported by Invest NI, is an industry led enterprise to transform research into commercial success and, the marine renewable energy sector is a key target. In the period 2018 – 2019, the CASE funded Triple T project came to an end with a testing regime in Strangford Lough. Post project evaluation has shown impact in terms of jobs created, new contracts and leveraged funding.
	CASE is also involved in the decommissioning work associated with Seagen.
	In relation to offshore marine, following success under INTERREG VA, the Bryden Centre was established at Queen's University Belfast. This funded industrial doctorate research centre focuses on marine and bio-energy and works in collaboration with the University of Ulster, AFBI, University of Highlands and Islands, Letterkenny Institute, Donegal County Council &

⁸ Established in September 2013, CASE can access £5m of research grant to fund collaborative R&D projects in partnership with academics at Queen's University Belfast, University of Ulster and the Agri-Food and Biosciences Institute. It can also signpost companies to other grant support through Invest NI, UK Government, the EU and Internationally.

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	 Dumfries & Galloway County Council. The centre supports 34 PhD students working on industrial challenges with approximately half in the marine renewable energy sector. DfE and Invest NI officials have participated in discussions with BEIS and industry officials to ensure that Northern Ireland interests were taken into account during the development of the Offshore Wind Sector Deal which was published in on 7 March 2019⁹. Invest NI is continuing to liaise with BEIS and the Offshore Wind Industry Council (OWIC) with a specific focus on supply chain opportunities for NI firms
Continue to work with the relevant authorities in the UK and Ireland to build on the progress achieved through the signing of the MOU for offshore renewable, as required.	 Ongoing. Invest NI has continued to liaise with DIT and OWIC in relation to offshore/marine and with developers to increase awareness of supply chain capability and opportunities for NI companies to penetrate Irish and Scottish markets. Invest NI are currently reviewing their offshore database with a view to updating the data to make it more applicable to forthcoming opportunities. In addition liaison is ongoing with 2 supply chain consultants and developers with a view to providing specialist support to allow a selected number of SMEs to more pro-actively target the sector. In March 2019, having secured Interreg Funding to assist SMEs address supply chain and innovation issues associated with the Marine Sector – the Ocean Power Innovation Network (OPIN) was re-launched. OPIN is facilitated by Invest NI, Scottish Enterprise and Sustainable Energy Authority Ireland (SEAI) as well as representative bodies from other EU states with the aim of advancing the development of ocean energy and drive technology innovation. The network's mission is to advance innovation by learning from experts in other industries, to push the boundaries of what's possible in ocean energy and progress innovative ocean projects in a coordinated way. It focuses on collaborative initiatives, knowledge sharing, applied learning and creative thinking in ocean energy technology development.
	Northern Ireland has eight representatives from industry and three local research institutes involved in the OPIN network which is made up of over 60 members from Scotland, Northern

 $^{^{9}\} https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784025/offshore-wind-sector-deal-web-optimised.pdf$

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	Ireland and the Republic of Ireland. This is currently being expanded.
	Other important industry groups in which Invest NI is active includes the Irish Wind Energy Association (IWEA), the Marine Renewables Industry Association (MRIA), the Northern Ireland Renewables Industry Group (NIRIG) and University College Cork (UCC).
	DfE officials participate in the BIC Energy Sector Working Group which seeks to encourage an approach to energy resources across the British Isles and, facilitates the exchange of information and sharing of best practice between the member administrations; encourages the cost-effective exploitation of the renewable energy resources available; promotes leadership in low carbon energy; increases integration of markets; and improves security of supply and affordability for consumers.
Participate fully in the DOE led Inter Departmental Marine Co-ordination Group (IMCG) to ensure that DETI's offshore energy interests are effectively represented within the development of new marine environment policy and legislation.	Ongoing. DfE continues to participate fully in the DAERA-led IMCG meetings/ activities and contribute to consideration of the Marine Strategy Framework Directive, the ongoing development of the NI Marine Plan, the establishment of Marine Protected Areas/Marine Conservation Zones in NI waters and, NI responses to correspondence and research on wider marine–related issues e.g. the ban on micro-beads in cosmetics.
With the Northern Ireland Environment Agency, develop during 2012-2013 streamlined administrative guidance for developers and officials on the licensing and consenting regimes for offshore renewable energy projects.	Complete. A Memorandum of Understanding (MOU) between DETI and DOE was signed in June 2013 and project specific steering groups established for the ongoing offshore projects. A work programme was agreed to timetable key actions and regulatory requirements and also a delivery plan to achieve streamlined administrative aspects of the projects e.g. joint consultation and advertising to avoid duplication.
	The two tidal projects have almost completed survey/ research work as part of the EIA process and the companies have been working with stakeholders throughout. A marine licence and consent to construct and operate a generating station have been issued to Tidal Ventures (by DAERA and DfE respectively) for a 100 MW tidal project at Torr Head (although the future of the project is uncertain following the dissolution of the Joint Venture Company driving the

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	proposal). Fair Head Tidal has submitted an application for a marine licence for a 100 MW tidal scheme at Fair Head, Ballycastle and this is currently under consideration. The Swedish company, Minesto, has completed the trials under licence of its Sea Kite tidal device in Strangford Lough.
	In light of the revocation of the Offshore Electricity (Environmental Impact Assessment) Regulations (Northern Ireland) 2008 and the May 2016 re-organisation of NI Departments, the MOU now needs to be reviewed and updated. This is currently ongoing.
Establish through legislation, the necessary offshore energy production and decommissioning regime, similar to that in force in GB waters, for offshore renewable energy installations in NI waters.	Ongoing. The policy consultation is complete. The introduction of an Offshore Renewable Energy Bill, for a number of reasons, has been stalled and it will be a matter for the Executive to pick up again, once it has been re-appointed. In the meantime, DfE officials are considering the potential requirements for a decommissioning programme for NI, with guidance from colleagues in BEIS who administer the GB Decommissioning Programme.
Continue to support the generation of electricity from offshore and marine renewables through appropriate incentivisation mechanisms.	Ongoing. DfE has continued to work with BEIS and other Devolved Administration colleagues on the development and implementation of UK-wide Electricity Market Reform (EMR). At the end of March 2015, DETI issued a Strategic Issues Paper on the implications of extending the implementation of Contracts for Difference to NI. Decisions have not yet been taken and will be a matter for the Executive to consider as soon as practicable following the re-appointment of the Executive. In the interim, DfE has commissioned Cornwall Insight Ireland, working with Ionic Consulting Ltd, to consider the potential for further renewables growth in NI and the policy drivers that will be necessary, including options for incentivisation (if required).
Ensure that Northern Ireland benefits from the range of NI and UK wide regimes and groups supporting research, development and deployment of offshore renewable energy.	Ongoing. DfE is seeking to re-invigorate its membership of and contribution to a number of UK wide groups related to the development and deployment of offshore renewable energy including the OWIC. It also continues to receive information from and contribute to policy papers from groups such as the Offshore Renewable Joint Industry Project (ORJIP).
	DfE has engaged with BEIS and OWIC on the proposals for an Offshore Wind Sector Deal and, through Invest NI, maintains an interest in how NI's supply chain might benefit from the outcomes of the Deal.

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	In its lead environmental regulatory role, DAERA participates with counterparts in Marine Scotland and the Marine Management Organisation ¹⁰ through the Offshore Renewable Energy Licensing Group ¹¹ to consider best practice/ consistent standards / shared research with regard to licensing and consenting offshore renewable projects across the UK. It also contributes to a number of offshore renewable groups such as ORJIP, OSCCA and the Marine Industries Working Group.
Produce an annual report on progress on ORESAP actions.	This is the progress report from 1 April 2018 to 31 March 2019.

¹⁰ The Marine Management Organisation licenses, regulates and plans marine activities in the seas around England so that they are carried out in a sustainable way.

¹¹ The Offshore Renewables Energy Licensing Group (ORELG) was established in 2010 to address the strategic regulatory challenges associated with the consenting of offshore renewable energy projects. Membership is drawn from government organisations, industry and non-governmental bodies.