Cluster Collaboration for Marine Renewable Energy in the Atlantic Area

Work Package 6
Cluster Collaboration for MRE in the Atlantic Area

Deliverable 6.3 of the Atlantic Power Cluster
Report on Cluster Collaboration for MRE in the Atlantic Area

Contents

1. EXECUTIVE SUMMARY .............................................................................................................................................. 4
2. METHODOLOGY ............................................................................................................................................................ 5
   2.1. Scope ........................................................................................................................................................................ 5
   2.2. Data sources ............................................................................................................................................................ 5
   2.3. Assumptions ............................................................................................................................................................ 5
3. INTRODUCTION ............................................................................................................................................................ 6
4. CLUSTER THEORY ............................................................................................................................................................ 7
5. RESULTS ........................................................................................................................................................................... 9
   5.1. Questionnaire feedback: Regional Cluster Questionnaire ......................................................................................... 9
   5.2. Seminar Feedback: Building an Atlantic Cluster for Marine Renewable Energy ....................................................... 10
6. ANALYSIS ....................................................................................................................................................................... 12
   6.1. Cluster information .................................................................................................................................................... 12
   6.2. Benefits of the Atlantic Power Cluster ..................................................................................................................... 15
   6.3. Recommendations/asks for the development of MRE in the Atlantic Area .............................................................. 16
7. TRANSNATIONAL COOPERATION .............................................................................................................................. 19
8. CONCLUSIONS ................................................................................................................................................................. 21
9. ANNEXES ......................................................................................................................................................................... 22
   9.1. ANNEX A: Regional Cluster Questionnaire ........................................................................................................... 22
   9.2. ANNEX B: Atlantic Power Cluster Accord Cover Letter ............................................................................................ 24
   9.3. ANNEX C: Atlantic Power Cluster Accord: Common MRE Working Agreement ..................................................... 25
Atlantic Power Cluster | WP 6 | Deliverable 6.3

Figures

Figure 1: Number of clusters per APC partner country .......................................................... 12
Figure 2: Types of sectors covered by clusters ........................................................................... 12
Figure 3: i. Clusters with national contacts; ii. Clusters with international links; iii. Clusters interested in international links .................................................................................. 13
Figure 4: Examples of existing transnational links of respondent clusters. .............................. 13
Figure 5: Graph showing the distribution of size of cluster membership in MRE..................... 14
Figure 6: Graph showing growth in the number of clusters established in MRE. .................... 14
Figure 7: Word cloud illustrating the responses to a question on added benefits of the Atlantic Power Cluster ........................................................................................................ 15
Figure 8: Chart showing the number of responses per topic for recommendations for the development of MRE in the Atlantic Area ................................................................. 18

Tables

Table 1: Clusters in the Atlantic Power Cluster Regions .......................................................... 9

Acronyms

ACPA - Atlantic Power Cluster Accord
ATPC - Atlantic Power Cluster
MRE - Marine Renewable Energy
R&D - Research and Development
SME - Small and Medium sized Enterprise
1. EXECUTIVE SUMMARY

This report forms part of Activity 6, Building the Atlantic Cluster, one of seven activities which make up the Atlantic Power Cluster project, funded under the Interreg Atlantic Area Programme. The project seeks to create a transnational strategy on marine renewable energy (MRE). Activity 6 aims to develop strategies and actions for transnational collaboration across the Atlantic Arc for offshore wind, wave and tidal energies. It is co-ordinated by the Scottish European Green Energy Centre.

Clusters, defined as a “concentration of competing, collaborating and interdependent companies and institutions which are connected by a system of market and non-market links”,¹ are a valuable tool for the development of sectors as they promote collaboration and competition as well as providing focus for those in or entering the sector.

The Atlantic Area regions are host to a number of industrial clusters directly or peripherally involved with MRE. This report brings together information on the clusters in terms of membership and scope as well as networks and desire to become more internationally connected. The information in the report was collated from a questionnaire sent to the clusters through the Atlantic Power Cluster regional partners.

The results from the questionnaire showed an overwhelming desire for greater international collaboration between clusters. The Atlantic Power Cluster has responded by developing the Atlantic Power Cluster Accord, a working agreement for clusters to collaborate on research and development, training and knowledge sharing through cooperative actions. Thus paving the way for further and enhanced collaboration throughout the Atlantic Arc and speeding the way to the successful delivery of the MRE sector.

¹ Department of Trade and Industry White Paper, Our competitive future, Building the knowledge driven economy (Cm 4176), 1998
2. METHODOLOGY

2.1. Scope
The scope of this report, a deliverable under the sixth work package of the Atlantic Power Cluster, is to highlight the benefits of, and interest in, clustering. The report will deal with the definition of cooperative structures to exploit infrastructures and assets available in the partner regions.

Recommendations from this report will look at the design of cooperative structures, building on existing resource and complementarities with a focus on technology development, project development and the development of coherent region wide policies.

This report aims to investigate options for transnational cooperation agreements that will develop relationships between stakeholders in the partner regions so as to jointly tackle challenges and opportunities, as a stated impact of the Atlantic Power Cluster.

2.2. Data sources
The Atlantic Power Cluster partners each circulated a questionnaire to the relevant clusters in their region. The questionnaire asked about the clusters remit, type of member organisation and their desire to collaborate. The questionnaire was completed by partners during December 2013.

Information was also gathered at the Atlantic Power Cluster transnational seminar in Bordeaux in February 2014, where there was a dedicated session on cluster collaboration.

2.3. Assumptions
All data was correct at the time of collection.

The author uses the phrase “cluster” to incorporate forums, working groups and clusters. Similarly, Marine Renewable Energy (MRE) in the context of this report refers to offshore wind, wave and tidal energy.
3. INTRODUCTION

The Atlantic Power Cluster (ATPC) is an Interreg funded project that looks to create an adequate political and social environment for the emerging sectors of offshore wind, wave and tidal as well as enhancing the competitiveness and innovation capacities of the industrial community in the Atlantic regions.

The project seeks to set up transnational collaboration within 15 Atlantic Arc regions across the UK, Ireland, Spain, France and Portugal. These regions have a variety of experience in marine renewable energy (MRE), and through transnational cooperation, benefits will be felt across the Atlantic Arc. This report focuses on the existing cluster, forums and work groups dedicated or related to MRE in the partner regions. The report analyses feedback from the clusters on their setup and current activity and considers where the ATPC could add further benefit and direction to those activities.

The ATPC is focussed on the regional activities and ambitions, the social acceptance of MRE, the development of the workforce and business opportunities. The work packages that developed each of these areas come together in the final work package “building the cluster”, of which this report is a deliverable. This activity will also see the dynamic mapping of the stakeholders and clusters across the project area, the development of transnational cooperation tools and coordination of mutually beneficial cluster activity.

The project started in February 2012 and is due to be completed in December 2014.
4. CLUSTER THEORY

Cluster theory has been well established since the 1960s, there are multiple variations on the definition – although all focus around the same main concept. The UK Department of Trade and Investment defined clusters as a “concentration of competing, collaborating and interdependent companies and institutions which are connected by a system of market and non-market links”. The definition from the Financial Times lexicon is that “A cluster consists of groups of associated and interconnected proximate firms that are linked vertically and/or horizontally through their commonalities and complementariness in products, services, inputs, technologies or outputs activities”.

Others, such as Porter, M. E., include a geographical element to them such as “geographic concentrations of interconnected companies”. It has been argued that given the ease of information sharing in a digital age that the locality of clusters is less important. There is a benefit to being aware of the value chain available in your location, but also what is available further afield and what you can offer to it.

There is a huge amount of research and reviews that have been carried out on cluster theory, and the intention in this paper is not to repeat that work, only to highlight the importance of clustering and show the reasoning behind the Atlantic Power Cluster activities.

The effect of clusters is twofold. Firstly, they are shown to have a fundamental impact on the successful growth of small businesses, with those businesses involved in the cluster having a greater potential to raise productivity and competitiveness, as well as promoting innovation by allowing cooperation in the creation and refinement of new ideas within the cluster. Secondly, they have an overall impact on the region where those with strong cluster portfolios are hotbeds of innovation. It is this combined impact that means there are many competitiveness and business strategies that incorporate cluster theory.

Clusters, or ‘networks of maritime excellence’, are promoted in the European Commission’s Green Paper on maritime policy which has then informed the priorities of the Atlantic Area

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4 The European Cluster Memorandum, Promoting European Innovation through Clusters: The role of competition, transnational cooperation and the cluster initiatives best practices.
Operational Programme 2006-13\(^8\). This promotion is also seen in the draft version of the Atlantic Area Operational Programme 2014 – 2020\(^9\).

The benefits of clusters can be extended, and their full potentials reached, when links between clusters are developed. The *European Cluster Memorandum*\(^5\) discusses this within the context of Europe and recommends the development of transnational links. These links need to not just be to other clusters, but also to wider market places. The offshore renewable energy industry, and the work done by the Atlantic Power Cluster, particularly highlights the benefits and opportunities for these transnational links. The Atlantic Coast has a vast maritime resource arriving at its shore from which a large number of member states benefit – those that are on the coast directly accessing the resource and through the wider European supply chain to those inland member states as well as feeding renewable energy into a European grid network.

The second work package (WP2) of the Atlantic Power Cluster project undertook a benchmarking study\(^10\) which highlighted the complementarities and gaps of the MRE sector within the partner regions. The information gathered for the WP2 study coupled with the results presented below (section 5) from the regional cluster questionnaire (see Annex A) show that there is significant scope to introduce and strengthen links between clusters and regional stakeholders across the Atlantic Arc, thus supporting innovation and collaboration in the MRE sector. The *European Cluster Memorandum*\(^6\) supports this approach as it calls for the strengthening of these transnational links between clusters. This activity therefore looks at how the Atlantic Power Cluster, can ensure we capitalise on the potential to have a wider international reach, increased knowledge sharing and collaboration on areas of mutual interest.

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\(^8\) European Territorial Cooperation Operational Programme, Atlantic Area, Transnational Cooperation, 2007-2013


\(^10\) WP2 study [www.atlantic-power-cluster.eu](http://www.atlantic-power-cluster.eu)
5. RESULTS

5.1. Questionnaire feedback: Regional Cluster Questionnaire

The APC partners were provided with a common questionnaire (Annex A) to be completed by their regional clusters. Table 1 below shows the responses received and also those that have gone on to sign the Atlantic Power Cluster Accord (ACPA), which is discussed further in section 7. Not all the ACPA signatories returned a completed questionnaire. 16 questionnaire responses were received from eleven partner regions. The results are discussed in section 6 below.

Table 1: Clusters in the Atlantic Power Cluster Regions

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Region</th>
<th>Accord Signatory</th>
<th>Qu’naire Reply</th>
</tr>
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<tbody>
<tr>
<td>Aerospace Valley</td>
<td>Aquitaine, France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asociation Cluster de Energía del País Vasco</td>
<td>Basque Country, Spain</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Asociation Cluster Naval Gallego (ACLUNAGA)</td>
<td>Galicia, Spain</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Aquitaine Wind Industry Cluster</td>
<td>Aquitaine, France</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Breitagne Pole Naval</td>
<td>Brittany, France</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Caithness Chamber of Commerce</td>
<td>Scotland, UK</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Caithness &amp; North Sutherland Regeneration Partnership</td>
<td>Scotland, UK</td>
<td></td>
<td></td>
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<tr>
<td>Consorcio Tecnológico de la Energía de Asturias, AIE (AINER)</td>
<td>Asturias, Spain</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EnergyIN – Competitiveness and technology cluster for energy</td>
<td>Portugal</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Foro Maritimo Vasco</td>
<td>Basque Country, Spain</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Galician Offshore Energy Group (GOE)</td>
<td>Galicia, Spain</td>
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<td></td>
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<tr>
<td>Galician Renewable Energy Cluster (CLUERGAL)</td>
<td>Galicia, Spain</td>
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<td>Galway Renewable Energy Enterprise Network</td>
<td>Ireland</td>
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<tr>
<td>IMERC – Irish Maritime &amp; Energy Resource Cluster</td>
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<td>Marine Innovation Centre (MARIC)</td>
<td>South West England, UK</td>
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<td>Neopolia MRE</td>
<td>Pays de la Loire, France</td>
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<tr>
<td>OCEANO XXI</td>
<td>Portugal</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Orkney Renewable Energy Forum (OREF)</td>
<td>Scotland, UK</td>
<td>✓</td>
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</tbody>
</table>
Seminar Feedback: Building an Atlantic Cluster for Marine Renewable Energy

On 19 February 2014 the Aquitaine Regional Council project partner held a transnational seminar in Bordeaux, France. The event was attended by over 100 delegates from all five countries of the Atlantic Power Cluster. The event concluded with a roundtable discussion between representatives of clusters and regions within the project:

- Serge GRACIA, Industrial Director of Valeol Group, Aquitaine Wind Industry Cluster, France
- Inaki GORRINO, Technology Advisor, Basque Energy Cluster, Spain
- Philippe MONBET, European Project Manager, Pôle Mer Bretagne, France
- Johanna YATES, SEGEC Ocean Energy Manager, Scottish Enterprise, UK
- François PIQUET, Director of Ouest Normandie Energies Marines, France
- Tiago MORAIS, Director of the Ocean Technologies Unit at INEGI (representing Oceano XXI), Portugal
- Jacques DUBOST, President, Bretagne Pôle Naval, France
- Juan Carlos AGUILERA, Energy Technology Consortium of Asturias, Spain
- Moderator: Marc LAFOSS, Energie de la Lune, France

The discussion started with an introduction to the types of organisations and clusters represented and then discussed the benefits of clustering as well as needs for the industry. It was highlighted that in order for this sector to succeed there needed to be a reduction in the cost of technology. This can be achieved through strengthening the European supply chain and the collaboration within it. There are many opportunities for market diversification to meet the needs of the MRE industry and therefore the creation and maintenance of jobs, but to do this there needs to be information sharing on the needs of the industry.

The speakers considered the benefits of strategic road maps to help discussion and the relationships between the industry and national and regional development agencies. It was also noted that due to market diversification that it was as much about the conservation of jobs as the development of new roles. Alongside strategic roadmaps the common interest in
harmonising regional strategies was discussed, where lessons learnt can be shared as well as the potential for consistency and understanding of a growing market. Regulation was also commented on in terms of ensuring stable and suitable processes for consenting and licensing of projects.

There are many areas that the clusters are interested in collaborating on, such as R&D and best practices for local planning and regulation. A significant benefit is seen to be the opening up of wider markets, in Europe but also globally. The internationalisation of SMEs, rather than only having access to a national market place is a real opportunity and possibility through clustering. The collaboration of clusters was seen as a way to promote collaboration and support the growth of the industry – all the panellists were supportive of connecting the clusters.
Atlantic Power Cluster | WP 6 | Deliverable 6.3

6. ANALYSIS

6.1. Cluster information

The figures in the following section detail the responses to the first section of questions relating to the set up and membership of the responding clusters. There is a variation in size and composition of the clusters which is analysed throughout this section.

![Number of clusters per country](image)

**Figure 1:** Number of clusters per APC partner country

All regions, although not all have responded, have at least one cluster focussed on marine renewable energy (MRE) or related to the supply chain for these sectors, see Figure 1 and Table 1. The main sectors of the responding clusters are illustrated in Figure 2. There is a reasonably even split among MRE, with a number of clusters covering multiple areas, however there is a slight bias towards wave and offshore wind likely to be linked to the availability of resource. The ‘other’ category includes those sectors that have cross over in their supply chain with MRE, such as aeronautics and oil & gas.

![Sectors included in Clusters](image)

**Figure 2:** Types of sectors covered by clusters
Figure 3: i. Clusters with national contacts; ii. Clusters with international links; iii. Clusters interested in international links

Figure 3, above, shows the level of interconnection that already exists between clusters, firstly nationally then internationally, the extent of some of these international links are highlighted in Figure 4. There was an entirely positive reaction to the question on the desire to create international links between clusters. Further answers suggest this response is due to the benefits seen from international collaboration such as wider markets, access to lessons learnt and potential inward investment.

Figure 4: Examples of existing transnational links of respondent clusters. Background image courtesy of www.free-online-maps.com

The cluster respondents show the average (median) size of the clusters is that they have 94 companies represented, the range of sizes is shown in Figure 5, above. The size of the cluster is likely to be dependent on a number of factors including age, size of local industry and number of other clusters existing in a similar location. Size of cluster, however, is not related to the level of activity seen within the cluster.
The opportunity to collaborate with other clusters provides a wider network to the smaller regions and clusters which although not directly increasing membership will improve the prospects for current members.

Figure 5: Graph showing the distribution of size of cluster membership in MRE

Figure 6: Graph showing growth in the number of clusters established in MRE.

Figure 6, above, shows the cumulative growth in number of clusters in the MRE sector from the mid 1990s to the present day. The earlier clusters tend to have a mixed industrial base membership, with the growth in number in the mid 2000s associated with a drive
towards the development of MRE. This trend is as expected as, although a young industry, initial investigations into using the oceans as an energy source began in the 1970s, it is only in more recent years we have seen the sector develop to the size it is now and as such have industry specific clusters identified with it. The early movers in this sector would have made use of the existing oil and gas, onshore renewables and general manufacturing/industrial clusters.

6.2. Benefits of the Atlantic Power Cluster

Respondents were asked if they foresaw a link between their cluster and the APC project, and what benefits may arise from this. The responses show that there is a real interest and desire in promoting collaboration to benefit their cluster members.

Figure 7, below illustrates the responses received, the size of the words is directly proportional to the number of times it was used across the replies. The largest word is seen to be ‘opportunities’, this shows the positive attitude towards work that has been done and is to be done to promote collaboration in the Atlantic Area.

The two most highlighted benefits in the responses were greater opportunities for transnational cooperation and increased business connections and wider networks. It can be seen from the previous section that a number of the clusters have existing links nationally and internationally, shown in Figure 3, and extent to which responses have noted the benefit of links or that the added value the APC can bring is extending those links gives the project activities a clear purpose. Related to these benefits is also access to a wider supply chain for the MRE sector. Through cluster linkages supply chain contacts expand thereby allowing gaps to be filled and the potential for collaborations where there are complementary services as well as healthy competition.

The next most identified statement was on the benefit of sharing best practice. This is an area that relates to many of the regulatory areas of MRE, but is most pertinent around the administrative, legislative and environmental aspects of projects as well as data and experience of prototype testing. There is a spectrum of experience in the permitting of MRE projects across the Atlantic Arc, through the sharing of experiences best practices can be developed to avoid all regions having to develop permitting and consenting procedures in a vacuum. Also related to the sharing of best practice is the ability to share data collection
methodologies and related information to allow comparability of data collected for design as well as environmental information. The ability to share comparable information on design and environmental monitoring expands the use of datasets and allows validation and extended use of modelling.

Also stated in the responses was the role of clusters and the APC in **lobbying and influencing**. A number of regions have MRE named in their strategic energy plans, such as the Basque Country and Scotland, there is still the opportunity in all regions and nations to promote MRE as a significant contributor to cleaner and greener energy mixes across Europe. Projects at transnational scale are important for the promotion of MRE at these levels and also at a European level as there is still support needed for this developing sector to reach its commercial potential.

Further responses cited improved **awareness and understanding** of MRE. The awareness of the sector needs to be developed at a number of levels, firstly within relevant supply chains were companies work in a related sector but have the chance expand and innovate into MRE. As with the lobbying and influencing role noted above there is still a need to inform and create awareness of the potential and benefits of MRE at a regional and national government level. As with all new sectors there is also an important benefit in education and the general public to be more aware of energy generation as a whole but also the impact and benefits of MRE to local communities, and globally, leading to increased social acceptance of MRE. The wider networks also offer a larger field for **dissemination of activities** supporting awareness raising and understanding of the sector.

Further to the benefits of increased business contacts and wider supply chains the knock on effect of this is an **increased awareness of R&D experience, capabilities and capacities**. This is hugely important for joint development of projects particularly innovation as it allows a wider network for finding partners for collaborative demonstration projects and in a wider influencing role either within partner regions and nations or at a European level.

Wider business networks also have the potential for attracting **inward investment** into regions, this adds to the breadth of the supply chain and the economic impact of the sector in a region.

**6.3. Recommendations/asks for the development of MRE in the Atlantic Area**

There were two areas that came out as most important. Firstly, the **evaluation of the supply chain**, ensuring that competencies, infrastructure and R&D capabilities were documented, as well as where the complementary services and expertise were available. This point was expanded to include recommendations on the adaption of current infrastructure such as ports and harbours to the MRE sector.

Secondly, the **simplification of administration and cooperation for common tasks**. Much can be learnt on the administration and legislation of this sector through investigating what has happened in other regions and sharing knowledge and best practice. A major ask from the sector is that project risk can be reduced where there is clarity and certainty in regulatory areas, this is something that can be addressed through best practice. The ability
to successfully knowledge share can be broadened to include collaboration on common tasks such as data acquisition, environmental monitoring and legislation. For some of these areas, they will have to be done internally within regions, but the methodology and practices can be shared to ensure comparability throughout the Atlantic Area.

**Training and awareness raising** were remarked on in a nearly half the responses. The responses state a need to improve training provisions for the MRE sector. There are many sectors that have shared skills, but there is a need to develop the maritime alongside the energy engineering expertise. Awareness raising covers two aspects, firstly related to training, ensuring that the industry is suitably visible to its future workforce, whether they are crossing over from another industry or coming directly from education. The second aspect of awareness is the wider public and decision makers. There is a need to insure that information is available for the general public to understand the benefits of this new industry and for decision makers to see how MRE needs to be factored into policy decisions, regarding planning, use of resources, ability to tackle climate change as part of the energy mix and environmental considerations.

A further highlighted aspect was the need for **financial support** through incentives and improving access to private finance. At such an early stage a sector, such as MRE, requires support through the research, development and demonstration phase. Offshore operations are in their nature an expensive business, but the energy that can be delivered from these projects once commercialised will provide renewable electricity and wider economic benefit at competitive prices. To get to commercialisation there needs to be support in the early stages, particularly in the current risk-averse lending climate that we are currently experiencing.

Related to the finance recommendation above, a number of the responses also reference explicitly the need for **demonstration projects** to be developed and deployed, to gain experience and knowledge of the systems and the environment.

Access to the **grid networks** and development of larger offshore grid networks were also mentioned in the responses.
Figure 8: Chart showing the number of responses per topic for recommendations for the development of MRE in the Atlantic Area.

These are all areas that the Atlantic Power Cluster can work to achieve through lobby, influence and awareness raising. A method for doing this will be to structure further collaboration between these clusters, and others in the partner regions to build on the dialogue already started here.
7. TRANSNATIONAL COOPERATION

The responses from the questionnaire show that there is a real interest in international collaboration. This is a situation that we can develop and build on to promote many areas of the MRE sector such as technology development, environmental monitoring and social acceptance. Collaboration within the supply chain offers scope for innovative solutions to technical problems and greater information sharing.

To harness this potential the Atlantic Power Cluster project has invited the clusters that exist within the partner regions to sign up to the Atlantic Power Cluster Accord. This working agreement shows a commitment to engaging in collaborative activities across the Atlantic Arc. The types of collaboration envisaged are highlighted below, although this is not an exhaustive list and all types of collaboration are encouraged.

- Joint networking activities
  Any activities that give cluster members the opportunity to network with the other cluster members through, for example, extending event invitations to the Accord signatory clusters; facilitated networking events such as pre-arranged business-to-business meetings on specific topics or projects or dissemination of project information and activities through the cluster networks. This will allow the broadening of networks, the opportunity for promotion of companies to expand potential markets and aid identification of products and services to fill local supply chain gaps.

- Opportunities for staff exchanges or secondments
  A tried and tested method for sharing experience and disseminating competencies and capabilities is to offer staff exchanges or secondments. This arrangement works well in academic institutions where it is widely used, but should not be limited to only this sector. Secondments from public organisations into private companies can provide a real insight into industry needs, and should be considered within this context.

- Sharing of information and best practices around the development of MRE, regulation and socio-economic impact
  As a relatively new industry, offshore renewable energy faces an information deficit in areas such as environmental and resource monitoring as well as operating data. It is important that information is shared as widely as possible, within IP rights, to avoid duplication of effort and spend and therefore to speed the development of the industry. To successfully share data it is important to share best practice methodologies in order to ensure quality and comparability.

- Education and training
  The ATPC networks can be used to promote relevant education and training courses available within the Atlantic Area. Work done through the ATPC on workforce readiness and social acceptance have information and tools available for early education as well as those looking to retrain or up-skill for MRE related jobs.

- Research, development and demonstration
Atlantic Power Cluster | WP 6 | Deliverable 6.3

There are opportunities for MRE through the Horizon 2020 work programmes on Energy and Blue Growth as well as collaborative actions being highlighted in the Atlantic Area draft Operational Programme 2014-20. This therefore provides a further opportunity for collaboration through consortium approaches to applying for European funding, particularly, but not exclusively, in the area of technology development.

- Promotion of further Atlantic Area cooperation in the field of MRE
  This would cover any other activities that would further promote the development of MRE in the Atlantic Area, such as market building and other activities with a shared interest in the sector.
8. CONCLUSIONS

There is a significant amount of activity that has taken place in the Atlantic Area in relation to MRE. This is demonstrated by the number and breadth of industry clusters that are dedicated to, or have an interest in MRE.

These clusters are active and have shown in their questionnaire responses that they have an interest in developing this sector through transnational cooperation. There are a number of areas of joint activities that have been highlighted in this paper that could be used to implement this willingness.

The Atlantic Power Cluster project much capitalise on this ambition by using the Atlantic Power Cluster Accord as a focal point for transnational cooperation and activities.
9. **ANNEXES**

9.1. **ANNEX A: Regional Cluster Questionnaire**

Thank you for taking the time to complete this short survey. The results of this questionnaire will be used to ensure the maximum benefit is achieved from the Atlantic Power Cluster project.

The Atlantic Power Cluster is a project supported by Interreg that aims to create an adequate political and social environment for the marine renewable energy (MRE); enhancing the competitiveness and innovation capacities of the industrial community in the Atlantic regions resulting in a transnational MRE strategy in the Atlantic Area.

In order to achieve these aims and ensure the success of the Atlantic Power Cluster the work package dedicated to building the cluster will look to identify synergies and links between existing regional clusters, fora, working groups, etc in the Atlantic Area.

For more information please visit [www.atlantic-power-cluster.eu](http://www.atlantic-power-cluster.eu)

Please complete this questionnaire and return to Johanna.yates@scotent.co.uk by Monday 14th April 2014

<table>
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<th>Respondent information:</th>
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<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Position in cluster / organisation:</td>
</tr>
<tr>
<td>Contact details:</td>
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</table>

<table>
<thead>
<tr>
<th>Cluster, forum, working group, etc. information</th>
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<tbody>
<tr>
<td>Region:</td>
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<tr>
<td>Cluster/Group Name:</td>
</tr>
<tr>
<td>Function / remit:</td>
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<tr>
<td>Area of interest:</td>
</tr>
<tr>
<td>Number of members:</td>
</tr>
<tr>
<td>Type of members:</td>
</tr>
<tr>
<td>Year cluster established:</td>
</tr>
<tr>
<td>Are you linked to any other clusters nationally or internationally? Yes / No Countries? Regions?</td>
</tr>
<tr>
<td>Would you like to link to other clusters nationally or internationally? Please list specific</td>
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<th>targets if applicable</th>
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<tbody>
<tr>
<td>Are you aware of the Atlantic Power Cluster project?</td>
<td></td>
</tr>
<tr>
<td>Do you foresee a link between your cluster and the ATPC?</td>
<td></td>
</tr>
<tr>
<td>What additional benefit do you think the ATPC could bring to the Atlantic Area?</td>
<td>e.g. transnational cooperation, greater business opportunities, best practice sharing</td>
</tr>
<tr>
<td>Do you have specific asks / recommendations for the development of Marine Renewable Energy in your region and the Atlantic Area?</td>
<td>Please provide as much information as possible – links and attachments welcome if applicable</td>
</tr>
<tr>
<td>Would you like to find out more about the ATPC?</td>
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The Atlantic Power Cluster (ATPC) is an Interreg funded project for the European Atlantic Area. Its partners include 15 regions from Portugal, France, Spain, Ireland and the UK as well as two institutions, CPMR and CIEMAT (Madrid). The project started in February 2012 and will conclude in August 2014.

The Atlantic Arc regions have a huge potential for marine renewable energy, including wave, tidal and offshore wind. The scale of this resource is significant in terms of the achieving EU energy policies for secure, clean and green electricity generation. The development of such a sector, provides not just the chance for renewable electricity, but will also contribute to the prosperity of the industries and populations, in the Atlantic regions, and meeting the objectives of economic, social and territorial cohesion.

The Atlantic Power Cluster project builds on the Marine Energy Working Group set up by the CPMR (Atlantic Arc Commission) and is intended to implement a transnational marine energy strategy so the partner regions can seek complementarities to tackle the crucial challenges for the development of marine energies in the Atlantic Area. Furthermore the project seeks to develop cooperation and joint approaches to facilitate the identification of new market niches in the renewable energy sector and the redefinition of educational and training programs as per the needs of the offshore and marine energy sector.

The objective of the project is to build a transnational marine energy strategy in the Atlantic Area through creating an adequate political and social environment for the marine energies and therefore enhancing the competitiveness and innovation capacities of the industrial community in the Atlantic regions.

The ATPC has consulted widely amongst its partner regions on training and education needs; availability of resource; MRE ambitions and the regulatory framework; social acceptance of MRE; test facility capabilities and the regional availability of business groups, clusters and organisations dedicated to MRE.

From this work we have established that the best way to facilitate the clustering of MRE interested parties in the Atlantic Area would be to link the clusters and organisations that already exist within the regions. By linking existing clusters there is added benefits for the clusters to establish or strengthen transnational links and the opportunities this will provide as well as for the overarching cluster that the links are made with the engaged and pertinent actors for MRE in the regions. To show a willingness to engage in such a transnational agreement, we have presented the attached Atlantic Power Cluster Accord for your consideration and signature.
9.3. ANNEX C: Atlantic Power Cluster Accord: Common MRE Working Agreement

We, the undersigned representatives, through engagement with the Interreg Atlantic Area funded project, the Atlantic Power Cluster 2012-14 and all involved in the development of a marine renewable energy (MRE) market in the Atlantic Arc Area, affirm our willingness to collaborate in the areas of social acceptance; training and skills development and business opportunities.

Such cooperation will be implemented where it will be of mutual benefit to the organisations and would be expected to include, but not be limited to:

- Joint networking activities
- Opportunities for staff exchanges or secondments
- Sharing of information and best practices around the development of MRE, regulation and socio-economic impact
- Education and training
- Promotion of further Atlantic Area cooperation in the field of MRE
- Research, development and demonstration

This Accord will promote the willingness of the undersigned to collaborate, confirming their dedication to the advancement of a successful marine renewable energy sector in the European Atlantic Arc therefore reaping the benefits that this industry will bring to European citizens in terms of security of electrical supply; realising renewable energy and emission reduction targets and sustainable job creation.

The Atlantic Power Cluster Accord is intended to promote collaboration in the Atlantic Area in the field of MRE and is expected to last for a period of 2 years, from 20 May 2014 before being reviewed.
ATLANTIC POWER CLUSTER
MARINE RENEWABLE ENERGY PARTNERSHIPS