ECOWindS – The European Clusters for Offshore Wind Servicing

Editorial

On behalf of the project team, I’m happy to welcome you to our third ECOWindS newsletter. ECOWindS (European Cluster for Offshore Wind Servicing) is an FP7 funded project with the scope to increase the innovative capacity of the offshore wind servicing (OWS) sector in European partner countries.

Our intention in this newsletter is to inform all involved and interested parties, regional authorities, the industry and our stakeholders, about recent project developments and outcomes in all four regions, including the mapping of cluster characteristics and the identification of strategic objectives for the OWS industry.

All the four regions, have benefited from involving local stakeholders and knowledge persons, who were invited to regional workshop meetings. We appreciate the dedicated involvement form all participating stakeholders, validating our findings and contributing in the process of concluding this up in a SWOT structure, and further transforming the findings into Strategic Orientations.

In addition, we have developed an international cooperation strategy to explore opportunities for cooperation outside the four regions involved in the project.

Next step will be the combined Midway Conference and Joint Action Plan workshop, to be held in Barcelona in synergy with EWEA 2014. Selected stakeholders representing Offshore Wind Service industry, authorities and Universities in all four regions, has been invited to give their contribution to the transformation from Strategic Orientation to Joint Action Plan / Roadmap. Read on in this newsletter and visit our website to get more information: www.ecowinds.eu

Hans A Pedersen

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Third project steering group meeting held in the East of England

The UK ECOWindS partners NWES Property Services and Nautilus Associates hosted the combined project and project steering group meetings at OrbisEnergy in Lowestoft, Suffolk, UK. Thirteen committed project members attended the two-day event.

Participants decided to combine the midway conference (an informative status meeting) with the joint action plan (JAP) workshop (where project stakeholders from each ECOWindS region prioritise activities for the JAP), and planned this combined event so it would benefit from synergies with EWEA 2014 in Barcelona.

Project partners also celebrated the one-year anniversary of the project. Nine specific project deliverables had already been achieved, with many more due in the two years left to finalise the project.

The next PSG meeting will be hosted by germanwind in Bremerhaven on 13 to 15 May 2014.

The project vision and mission was discussed, highlighting that cost reduction is the overarching theme of ECOWindS. Although the project intends to contribute to cost reduction, it will not actually achieve this cost reduction itself. The project’s vision was therefore revised:

“To pave the way for new research and understanding of how the costs of offshore wind servicing can be driven down through research, innovation and cross-regional cooperation.”

All project partners had been deeply involved with their respective regional mapping processes, compiling results and formulating conclusions. This information provided the base for planning the next six to twelve months and defining activities and responsibilities. Three forthcoming deliverables and suggestions for templates were discussed and decided on.

Further information www.ecowinds.eu

Project partners:

[List of project partners and their roles]

[Image of project partners]
ECOWindS partners gain insight into the state of the industry across Europe through regional mapping of all four ECOWindS offshore wind clusters

The comprehensive regional mapping of the four participating offshore wind clusters – South Denmark, East of England, Northwest Germany and the Møre region in Norway – has been successfully finalised by the ECOWindS partners. It was the first major work package of the ECOWindS project which began in November 2012.

“The aim was to build up a thorough understanding of each cluster’s strengths and challenges, involving an analysis of internal and external factors relevant to characterising the offshore wind service sector”, said work package leader Susanne Findeisen from germanwind. “This aim has been fully achieved”. All seven ECOWindS partners successfully completed a detailed regional mapping of their clusters, with particular focus on the offshore wind servicing (OWS) sector. The outcomes represent vital starting points for ECOWindS’ subsequent tasks, which are to identify synergies in ECOWindS clusters and draft a joint action plan for enhanced cross-cluster cooperation.

SWOT analysis was used to identify the clusters’ individual strengths (S), weaknesses (W), opportunities (O) and threats (T). germanwind provided an analytical framework that was completed by all partners based on analysis of literature, reports and statistics. Interviews with experts added to the documentary evidence. Findings were verified and finalised in four regional mapping workshops held from October to December 2013, one in each ECOWindS cluster. Workshops were attended by relevant stakeholders representing the offshore wind industry, research, education and training institutions, regional authorities, business development institutions, and innovation service providers. They discussed and validated mapping results, in particular regarding SWOT, prioritising them (Figures 1-4) with facilitation by ECOWindS partners.

The workshops served to validate regional mapping and engage stakeholders with the ECOWindS project, allowing industry representatives to voice their concerns and capabilities, and equipping ECOWindS partners with an up-to-date understanding of the OWS sector. The pooling of information from many sources proved invaluable. Successful mapping of the workshops were an important milestone for the ECOWindS project, establishing a sound baseline to compare capabilities across the clusters and for the ECOWindS consortium to develop a meaningful joint action plan which can foster innovation in the OWS sector and ultimately contribute to cost reduction in the offshore wind industry.
Outcomes from the regional mapping of the Northwest Germany offshore wind cluster, a large cluster and far offshore pioneer possessing a complete value chain and a variety of competences

The Northwest Germany offshore wind cluster is large, numbering 400 committed stakeholders from the offshore wind industry and research sector who are members of the WAB network. Well positioned for offshore wind servicing (OWS) due to broad competence on the entire value chain and the industry’s strong market position, the cluster focuses strongly on manufacturing but also has a large share of stakeholders involved in OWS. Adequate ports, harbour infrastructure and harbour superstructure supporting OWS activities are in place for future offshore wind farms.

A key strength of Germany’s offshore wind industry is that it is a pioneer in far offshore wind farm installation (water depth > 20 m; distance from the shore > 20 km). It also has extensive cross-sectoral competence in logistics and onshore wind, relevant for the further development of OWS. But it does not have a domestic oil and gas industry which could provide cross-sectoral experience for OWS. Practical experience with OWS on German offshore wind farms is limited to a small number of operational projects in German waters.

Germany’s offshore market is still small (520 MW installed capacity in January 2014). If planned and approved offshore wind farms are taken into account, it will however become one of the largest markets in Europe. Today many cluster actors focus on the domestic market, with related risks. More diversification and internationalisation are needed. The industry expects to experience a great learning curve and tap into substantial cost-reduction potential (of between 19 to 33 percent for operational costs). To fully exploit this, more evidence-based learning is needed that relies on monitoring offshore wind operations and analysing operational data. The exchange of best practices for OWS with other clusters would be helpful and welcome.

Regulative framework conditions for offshore wind (Renewable Energies Act, feed-in-tariffs) are still good, and legal problems around grid connection have been solved by new regulations. Recent coalition negotiations following Germany’s 2013 elections gave rise to political debate and uncertainty about the future of the offshore wind industry, repelling investors and causing insolvencies. A more stable and long-term political policy is needed. The offshore wind industry in Germany’s northwest region does however find strong support in regional government administrations. Cooperation among the states involved (and their administrations) should be further increased.

Excellent research institutions work in the field of offshore wind, many of them situated within the cluster region. Many other relevant institutions outside the cluster are linked to it through joint research projects. Testing facilities for offshore wind are represented in the cluster. Overall, the offshore wind industry boasts high levels of innovation and research, development and innovation (RDI) activities. Cluster actors are involved in many national and international business/research cooperative efforts (research projects), a vital pre-requisite for innovation. But more of this is desirable, involving other stakeholders than the “regulars”. And transparency on available competence in the knowledge sector should be improved upon for companies seeking research partners.

The involvement of small and medium-sized enterprises (SMEs) in research projects is very limited due to limited resources. Here joint RDI departments could be set up in several SMEs to support their research efforts. National and regional research funding specifically for the offshore wind industry and OWS RDI is limited

1 Source: Prognos/Fichtner, 2013
and does not adequately support meeting the mid-term targets set for the industry. There is also a need to define and communicate innovation and funding demand for OWS, and to find innovation and patent strategies in industry at the national level.

The offshore wind industry faces great challenges due to the serious lack of skilled workers forecast for installation, operation and maintenance operations. The offshore wind industry competes with other industries in terms of wages and working conditions. However, educational institutions in the cluster offer specific (degree) courses and further education for both vocational skills and academic degrees. Initiatives have also begun within the cluster to increase qualification options in the cluster region (the Betriebliches Bündnis Windenergie, for example, is a strategic collaboration of regional administration and the industry to create new training opportunities and prepare skilled workers for the wind energy sector in Germany’s northwest). The industry also needs international qualification standards, vital for reducing barriers within the European market.

Regional advisory group contributes to the ECOWindS project in the East of England

To finalise the regional mapping exercise in the East of England cluster, the UK partners hosted a workshop attended by key representatives from the region’s offshore wind servicing (OWS) industry, the regional research sector and both regional and national government bodies.

Stakeholders first focused on identifying the cluster’s strengths and weaknesses. Strengths included the significant existing expertise in OWS, and the large domestic and international markets open to companies in the cluster. The region’s infrastructure is also uniquely suited to OWS, with port facilities already well established as bases for installation and O&M activities, and a well-built supply chain and large workforce to support these activities. These factors position the East of England as a UK and international leader in OWS.

The region has a vibrant and thriving energy sector, and a national regulatory framework supports the demand for offshore wind and renewable, low-carbon energy generation in other forms. The cluster also has a strong capacity for innovation, with several high-quality research and training providers to support the development of technology and processes in the sector, and a considerable number of funding providers nationally and locally providing grants and loans for innovation. Also unique is a capacity to test new innovations in OWS at existing projects off the region’s coasts that are approaching or have reached their warranty period.

Weaknesses identified by stakeholders included the cluster’s humble reputation due to the limited promotion of its strengths, and limited knowledge-sharing among industrial players, particularly on key OWS challenges and costs. The current shortage of skilled personnel and a lack of clarity on the funding and support available for business innovation in the region were considered significant. Also noted were the currently low UK content in regional and national offshore wind project supply chains, and low levels of standardisation in the supply chain, installation, O&M technologies, training, and health and safety.

Key opportunities for the OWS industry in the East of England are in the significant UK and European markets at southern North Sea sites. Participation in these OWS markets presents significant economic opportunity to the region, and indeed the UK as a whole. Also significant to the cluster is the large potential for new job creation in OWS, and demand for an upskilled workforce of managers and degree-level engineers.
Other opportunities include the ambitious legally binding targets for energy generation from renewable sources by 2020 driving investment and industry growth, large opportunities for cost reduction in offshore wind servicing (OWS) resulting in improved efficiency, and the attractiveness of the offshore wind (OW) and OWS sectors. But it was also seen that the regulatory incentives behind OW fail to provide firm price guarantees in the long term, and there is no firm and consistent target for the deployment of OW in the cluster and nationally. A second threat considered significant by stakeholders was that planning and licensing procedures can lead to delays in development and inefficiency in wind farm O&M, particularly when environmental legislation affects licensing, enforcing costly and inefficient environmental and seabed monitoring. Additional threats identified included the lack of standardisation in OW and OWS in the technologies and processes used in the UK and the EU and between the OW and oil and gas sectors, the need for investment in the region, and the expense of OW generation technology.

Representatives from Denmark’s complete value chain validate SWOT analysis findings and contribute to development goals

Offshoreenergy.dk is Denmark’s national knowledge and innovation network for the offshore sector. Offshoreenergy.dk has more than 275 active members representing the entire offshore wind supply chain, from consultancy, design, production, installation, surveillance and maintenance, to relevant public authorities and educational establishments.

Key findings at the regional mapping workshop were that Denmark holds a unique position as a world leader in offshore wind technology, and can fully cover the OW supply chain. The Danish RDI environment is pro-active and cooperates both informally and formally, although there is room for improvement in cooperation between industry and research institutions/universities. Denmark also has world-class test facilities. Its port facilities and onshore infrastructure are well developed and can meet future demands.

The challenges ahead call for increased cooperation in the Danish supply chain and cross-regional cooperation. One opportunity lies in international conglomerates entering the Danish supply chain and utilising its leading position and experience to a much greater extent by addressing the entire global market. The overall challenge of reducing the levelised cost of energy (LCoE) cannot be reached without standardisation and mass production that calls for a stable growing market and international cooperation, meaning cooperation and agreement between the largest markets (UK, Germany, and Denmark) at both industrial and political levels.

Some of the obstacles ahead are the “Death Valley” in project installations (2015) and uncertainties in leading markets (UK and particularly Germany). The industry sees production volume driven by stable markets as one of the major ways to lower costs, together with investments in cost reduction. Local content demands are also an obstacle that will work against LCoE reduction, particularly from the Danish perspective, as the majority of the world’s existing turbine capacity is provided by businesses operating in Denmark. However, if the industry succeeds in reducing the LCoE of offshore wind power, it has tremendous growth opportunities. Many of the largest companies in the world are showing willingness today to invest in this energy technology.

Using SWOT analysis for prioritisation at the workshop paved the way for establishing a more focused and strategic mindset about these param-
eters and was very beneficial to all participants. For ECOWindS partners and the ECOWindS project, it was important to have the regional mapping and the strategic objectives emerging from SWOT analyses discussed and validated by key experts in the Danish offshore wind sector. This provided new insight into priorities and will be used to focus the future work.

Inspiring workshop for Norway’s Møre cluster

Aalesund Science Park and Aalesund University College held their workshop on December 3 in Aalesund, Norway. Well attended by representatives of industry, government administration and research (triple helix), the workshop was very useful and well received. It built on findings from the regional mapping analysis.

Despite the fact that Norway does not have a developed domestic market for offshore wind, participants agreed that the Møre region cluster has access to great opportunities in the future development of offshore wind in Europe and elsewhere. The cluster is characterised by a very high rate of innovation and possesses long experience with advanced maritime operations. Many companies in the cluster are looking to diversify their areas of focus and are eager to turn towards new markets, technologies and industrial networks. The cluster will also work towards developing new academic partnerships. A number of companies are already delivering to the OWS sector in Europe.

Key findings from the SWOT analysis of Norway’s strengths were its long experience with advanced maritime operations, its high level of innovation, its transferable competencies and technologies, and its capacity to find tailored solutions for different markets and customers. Weaknesses were seen in Norway’s lack of a domestic market, its high levels of cost, the fact that it is accustomed to a high-end/high-profit market, and its lack of an industrial base for turbine construction. However, opportunities were visible in lowering investment in the oil and gas sector when there is a change in focus, in diversifying areas of focus, in the well-established industrial networks that could be made available for offshore wind servicing (OWS), and in the new markets, technologies, industrial networks and academic partnerships that could be opened up. Finally, threats were seen in the already high activity of the oil and gas sector, low public commitment, the lack of a domestic market and public predictability, and not least, the lack of production facilities for large installation manufacturing.

Selected key results from cross-cluster comparison

The regional mapping and cross-cluster comparison of the four participating ECOWindS clusters revealed similarities but also substantial differences in the regional characteristics of the ECOWindS clusters.

Cluster sizes were quite different. Germany’s offshore wind cluster in its northwest region is the largest, with more than 200 industrial players involved in offshore wind service (OWS). The South Denmark cluster comprises 120 companies and the East of England cluster around 40 companies involved in OWS. Norway’s Møre region cluster is essentially an offshore oil and gas cluster with up to five businesses active in the offshore wind industry. Without an own offshore wind market much in place, the Norwegian industry is still developing.
An analysis of value chain representation in the clusters illustrates their different points of focus and phases of development. Denmark, the pioneer of offshore wind energy with more than 20 years of experience, has the most complete value chain. The East of England cluster is particularly strong in installation, operation and maintenance, reflecting the UK’s high installed capacity. Germany’s northwest region cluster still focuses on manufacturing as the industry has just entered the acceleration phase with only a few offshore wind farms in operation. Despite its scarcely existent domestic market, Norway, possessing well-known competence in the offshore oil and gas sector, has potential for a strong supply chain in some areas of offshore wind (Figure 1).
In addition, all ECOWindS clusters possess wide competences in complementary industries (Figure 2). For example, Norway has high expertise in robotics, and Germany and Denmark have long experience with onshore wind energy. Know-how from the oil and gas sector is present in all clusters except Germany. Knowledge transfer from these industries to the offshore wind sector holds great potential for innovation and has been identified as a vital task for each ECOWindS cluster.

Since cooperation between cluster actors is a prerequisite for innovation, it is important to analyse cluster performance in this context. Regional mapping showed that cooperation is generally good in all clusters, but also identified a need and good potential for intensifying collaboration (especially B2B and industry/science collaboration).

**ECOWindS partners identify strategic objectives for the offshore wind servicing (OWS) sectors in Denmark, the United Kingdom, Germany and Norway**

ECOWindS’ objective is to improve the innovative capacity of the OWS sector in the participating European clusters in Denmark, the United Kingdom, Germany and Norway. To foster innovation within the OWS sector, cooperation among these offshore wind clusters is a prerequisite for cost reduction and European competitiveness. An essential task within the project is to develop an understanding of similar objectives and fields of interest and encourage synergetic efforts. Strategic objectives were identified for OWS based on a comprehensive analysis of strengths, weaknesses, opportunities and threats (SWOT analysis) in all ECOWindS clusters. In regional mapping workshops hosted by each ECOWindS cluster between October and December 2013 (Figure 1),
a strategic orientation analysis was applied to examine the strengths and weaknesses which can make use of opportunities and overcome threats. The objectives identified in each cluster were then compiled, compared at a cross-cluster level, and divided into key theme areas.

Standardisation and industrialisation

Standardisation was widely identified as a key objective for improving efficiency in the OWS sector. Standards vary to a large extent, depending on where a wind farm is being constructed. A single streamlined set of guidelines would greatly benefit the entire OWS sector, regardless of whether these guidelines affected design, operation and maintenance, health and safety, training standards, or even the need for an industry standard on how closely wind farms could be installed to telecom cables. Combining standardisation with industrialisation would also lead to cost reductions as components would be interchangeable and the industry would benefit from economies of scale. International standardisation would also create a level playing field regarding qualifications for skilled labour and universal specifications for vessels.

Qualifications and a skilled workforce

Strategic objectives regarding qualifications and skills focused on standardisation and filling gaps in the skilled workforce within the industry. By matching skills to industry demand and providing a standard set of qualification requirements (such as those of the Global Wind Organisation for safety) the OWS sector can continue to meet the needs of the industry and have a workforce adequate for addressing future challenges. If consensus is reached on the level of qualification required for OWS personnel, this will help clusters adjust their training and qualification programmes to meet these standards.

Research, development and innovation (RDI)

The Norwegian cluster focused in particular on strategic objectives for RDI. The Norwegian offshore wind market is still in the technological development stage, so innovation is key. Partners suggested creating an innovation strategy for the cluster at an inter-regional or inter-country level, with the potential of applying this strategy at the cross-cluster level as well to ensure innovation is linked to sector and industry requirements and benefits the entire OWS sector.
Universities and research institutions should cooperate and focus on developing solutions for challenges arising in five to ten years. Academic research projects typically run two or three years, after which their findings are transferred to applied industrial R&D with a lead time of easily another two or three years. Research projects that start solving today’s problems tend to be late by design in delivering solutions and informing industrial RDI. Identifying potential problems as a strategic goal for RDI would help to future-proof the OWS sector as it would allow solutions to be developed in a smooth flow of new projects, a much better alternative to the industry having to repeatedly slow down to find solutions for problems that could be well predicted.

**Funding**

Access to and the visibility of funding were identified as strategic objectives. The OWS sector would in fact struggle without access to funding for R&D and other projects. Here it is key to have joint funding for projects (especially as projects become larger and more costly) and access to additional funding streams. Sometimes funding for projects is available but relatively unknown or rather difficult to apply for. Concerns about funding were more intense in the clusters with more developed markets because their funding requirements are much higher due to project size.

**Business collaboration**

All four ECOWindS clusters identified business collaboration as a key area within their strategic objectives.

Integration and collaboration at all levels of the supply chain ensure that the OWS sector can fully develop and grow. Companies (and research and government administration entities) must work together to meet the needs of the industry. The design and installation of a wind farm requires input from many different organisations. Smooth and efficient coordination would mean that projects have a greater chance of being delivered on time and within budget. The formation of partnerships within and across clusters can help meet the demands of the sector and create an integrated and robust supply chain, vital to markets of the future.

**Political support and industry regulation**

Political support is important to any industry, and especially for offshore wind and OWS. Without sufficient political backing it would be difficult for the industry to meet the demands of current and future projects. Strategic objectives here include improving existing national political support and ensuring it is in place in future, and looking at external factors (such as the European super-grid and local content requirements). These are key areas for all European clusters as they can support the industry and help remove barriers that could have an impact on projects.

**Strengthening the market position**

Individual strategic objectives named by each cluster are closely linked to their own profiles, but the broad trends identified within these objectives can be applied to any cluster:

- Focus on strengths
- Develop a strong supply chain
- Understand market needs
- Export to other clusters wherever possible
- Cluster development

Playing to cluster strengths opens up greater opportunities for cross-cluster collaboration on new wind farm projects (i.e. one cluster focuses on manufacturing and another on installation, operations and maintenance).

Further to the more mature OWS clusters, the Norwegian cluster identified opportunities in its extensive maritime experience that could be leveraged by focusing on floating structures for deep water, far shore installation. Additionally, Norway's cluster can position itself with vessel or cable-laying expertise and use this as a unique selling point.
Infrastructure

Having a robust infrastructure is key to industry development. Without it, projects can be delayed and additional costs incurred. Improved infrastructure was therefore identified as a strategic objective for the industry (i.e. greater vessel capacity and new or improved harbour facilities).

This also includes the need for testing facilities. Specific objectives related to testing were mentioned in other theme areas as well. The testing of new ideas and innovations can readily be carried out under “real life” conditions at existing wind farms. If a wind farm is out of warranty, one or more of its turbines can be used for testing purposes, eliminating the need to build new test sites.

Data management

Data management has been identified as key. The volume of operating offshore wind farms generates a massive amount of data, especially on weather conditions and turbine performance. Analysing this data could assist in further wind farm development or in revising designs. One example is the SPARTA (System Performance, Availability and Reliability Trend Analysis) project which will have huge impact on understanding performance issues and positively affect the OWS sector. The data analysis of offshore wind projects promotes innovation in design as well as in operations and maintenance, helping to make components that will last in real life conditions with less need for maintenance or replacement.

Encouraging international cooperation in offshore wind servicing

A key output of the ECOWindS project is the international cooperation strategy, produced by the UK partners with contributions from the full consortium. The strategy’s objective is twofold: firstly, to identify and map existing and potential markets for offshore wind servicing (OWS); and secondly, to provide a framework for guiding companies, regions and countries in collaboration at an international level.

International cooperation encourages countries to work together towards common goals, open new relationships, business and research opportunities, and share best practice experience. Collaboration improves efficiency in technological development and allows for strategic objectives to be developed that make use of partnerships.

The OWS sector around the world includes established markets like the UK, Denmark and Germany, new markets like China, and developing markets like the United States. The international cooperation strategy maps out the strengths and weaknesses of 21 offshore wind markets (including ECOWindS partners).

The strategy has also identified the ways countries and key stakeholders from industry, government administration, and research can work together to achieve ECOWindS’ project vision: to pave the way for new research and understand how the costs of OWS can be driven down through research, innovation and cross-regional cooperation.

The international cooperation strategy focuses on four broad areas identified as conduits to facilitate cooperation: 1) sharing of knowledge and best practice; 2) exchange of personnel; 3) use of shared resources; and 4) cross-funding.

A key recommendation of the international cooperation strategy is the establishment of an international advisory group of stakeholders in key international markets. This group should focus
on setting the future agenda for the offshore wind industry and contributing to cost reductions within OWS by helping to establish and promote priority research and standardisation across the industry globally.

For more information on the international cooperation strategy, contact the UK partners.

**Next steps in the ECOWindS project**

To date, ECOWindS partners have completed comprehensive regional mapping in each of the research-driven clusters, identifying the clusters’ key characteristics, supply chains and capabilities in terms of offshore wind (OW) and offshore wind servicing (OWS), and the capability for innovation in OW and the OWS sub-sector. The state of the industry in each cluster was summarised in a SWOT analysis which identified the key strengths, weaknesses, opportunities and threats found in each one.

As described above, each partner engaged local stakeholders in regional mapping and in drafting or defining strategic objectives for its cluster, aiming to advance the sector in that region through strategic targeting. The next phase of work, led by the UK partners in the East of England, will see the ECOWindS partners taking these strategic objectives and turning them into regional strategies for the development of dynamic, innovative regions for OWS. These strategies will promote OWS growth, broaden opportunities for innovation involving and benefiting local companies, and open business opportunities and new markets to cluster industries.

The three-year ECOWindS project is fast approaching its midway milestone, marked by the midway conference to be held alongside the EWEA annual event in Barcelona. ECOWindS partners will invite
stakeholders, representatives of industry, research and administration from each ECOWindS cluster (East of England, Møre in Norway, Northwest Germany, and South Denmark), to come together and learn about the project’s findings. At the midway conference, stakeholders will also be invited to contribute to the next stage of project work to develop a joint action plan defining how each region can work together to advance the industry. Incorporating regional ambitions and strategies, the plan will define projects, partners and funding options. This will be an exciting event, encouraging stakeholders to contribute and make their views and expertise heard.

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