

# Submission from the Western Development Commission to the Green Growth Public Consultation- Questions

The Western Development Commission (WDC) is a statutory body with a remit to promote and encourage economic and social development in the Western Region (counties Donegal, Sligo, Leitrim, Mayo, Galway, Roscommon, and Clare). The WDC operates under the aegis of the Department of Rural and Community Development and the Gaeltacht.

We welcome the opportunity to make a submission on the Green Growth Industrial Strategy. The Western Region has significant potential in most of the areas for Green Growth outlined, which provide significant opportunities for the economic development of the Western Region.

We have followed the format of the questions in Forms for the consultation. If you would like to discuss any of this further, please get in touch. Contact details are below.

## **Powering Prosperity**

1. Which specific actions in Powering Prosperity – Ireland’s Offshore Wind Industrial Strategy were most impactful or effective? Could similar actions be applied to support other green technologies? Please identify the action(s) and, where possible, provide evidence or examples to support your view.

The inclusion of the balanced regional development pillar in Powering Prosperity was very significant. In terms of actions, the focus on Offshore Wind (OSW) in the Regional Enterprise Plans (REPs) was an important starting point for developing networks and understanding of the needs of different regions in relation to the development of the sector. It was very effective in the West and North West regions where a number of projects have focused on what is needed especially in terms of infrastructure and skills and on some opportunities including for marine engineering, and demand side potential in areas such as in Green Energy Parks.

The widened focus on Green Growth, as it relates to the energy sector, should be a key element of the next REPs which are currently in development. It is important, however, than the Plans also continue to build on the work that specifically focused on Offshore Renewable Energy (ORE). While the actions under the REPs were a very effective starting point, they need to advance further into more practical development actions, either through the REPs or other mechanisms.

The emphasis on balanced regional development in the Green Growth Industrial Strategy must be maintained. These technologies, which are usually located in less developed regions and provide important opportunities for more high value economic activity. While the actions in Powering Prosperity for balanced regional development were welcome, and important, we think that this could be enhanced in the new strategy, with a particular emphasis on enabling the regions to be ready for development in this area of industry. Anticipatory infrastructural development is also a key part of ensuring that the opportunities from these developing technologies available in regions such as the north west which have long faced the challenges of infrastructure deficits.

## Green Technologies

2. Noting the broad set of technology areas mentioned previously, are there particular green technologies related to the energy system that Ireland should focus on to meet climate targets and maximise economic opportunities from the green transition?

While there is significant potential in all of the areas to be covered under this Green Growth Strategy, we believe that the greatest future opportunities will be in the Floating Offshore Wind sector (FLOW). This is a less established technology than many of the others listed so there is greater potential for innovation and processes which could provide very substantial returns and could also lead to establishment supply chain elements in Ireland. FLOW is also a key area because of the very significant potential for its development off our west and north west coasts so that innovation, technological development, manufacturing and supply can be located close by. In addition, given the challenging conditions in this ocean, products and innovations developed here will have applicability globally. With the decision not to progress Action 27 in Powering Prosperity it is important that Test sites (both quarter scale and full scale) are an element of the Green Growth Strategy. This is key to allowing research and innovation and linking enterprises operating in the green growth sectors with international developers using such sites.

Given the emphasis on wind generation both on and offshore, and limited grid interconnection with other jurisdictions, there is also significant demand for long term storage and potential for innovative development in this sector. Associated with long term storage is the potential for green hydrogen, which as well as providing a fuel for a variety of markets, will also provide some solution to grid restrictions

3. Which of these technologies do you consider need additional support in terms of supply chain development? What part of the supply chain requires support? Please note the relevant technology/technologies and provide evidence to support this.

Supply chain supports should be focused on the newer areas of technology, and those with the highest levels of competition and innovation. Onshore wind is well established and has well developed supply chains, while offshore wind (especially FLOW) is much less established and has a longer, more complex supply chain. At the same time, it is the technology which has the potential for the most benefit for Ireland. Thus, a clear focus in this area would be important. There is also significant potential in storage, while the challenges in grid development in the north west mean that this region is an ideal test bed for exploring innovations in this sector. However, A detailed supply chain analysis is necessary for these technologies recognising that it can be difficult in areas, such as long term storage, where the dominant technologies have not yet become established. As part of the development of the Industrial Strategy DETE should conduct detailed examinations the supply chains for each of the technology, establish where the opportunities for Irish industry lie, and where supports are most needed.

4. Which of these technologies do you consider need additional support in terms of broad/system research, development and innovation and in-company RD&I? Are there specific barriers to innovation or R&D in these sectors that Government could help address? Please note the relevant technology/technologies and provide evidence to support this.

While all of the technologies which will form the basis for the green growth industrial strategy require, and would benefit from further research in a variety of contexts, providing test sites for FLOW innovations is an essential element of R&D which could potentially provide very significant industrial spin offs. For this reason, despite the challenges they have already faced, we emphasize the importance of developing test sites. There are then opportunities for developing clusters adjacent to test areas, where the practical innovations and processes can be further developed and networks of knowledge established.

5. Which of these technologies do you consider need additional support in terms of industrial deployment? Please note the relevant technology/technologies and provide evidence to support this.

As noted above in relation to supply chains, detailed, robust sectoral analysis should underpin the decisions about areas for support for industrial deployment. This would provide in this about areas in particular need of development for each of the technologies, bottlenecks, and the opportunities which have most potential for Irish industry.

6. What are the main barriers to scaling renewable energy and green technologies in Ireland (e.g. regulatory, skills, infrastructure, finance)?

As discussed throughout this submission, lack of infrastructural investment has long been a barrier to scaling in these sectors, (for example grid restrictions for onshore renewables, and both grid and port development for offshore renewable energy along with regulatory and policy certainty. The necessity for a whole of government approach is discussed elsewhere but having strong overarching policy goals which are broken down into achievable targets, and a focus on the anticipatory investments necessary, underpins all potential development for green growth industries.

While we have discussed the potential for cutting edge innovation in FLOW and other technologies and the opportunities that this may bring, there are very often significant financial barriers for those developing solutions. The large scale at which much renewable energy generation and associated technologies take place, and the challenging environment in which they often operate means that the many physical innovations require substantial long term investment and often go through innovations and development at different points of scale. This means innovations are expensive to develop and when the market is uncertain or there is competition for adoption finance is an important barrier. Options for early stage investment, and supports for R&D can help, along with recognition of the long time horizon associate with bring innovations to market.

The WDC operates the Western Investment Fund which provides seed investment to small scale early stage enterprises and while it takes a long term view it does not have funds of scale required for many of the investments needed in this sector though it can play a role in the development of some start ups, as it has done very successfully in the medical devices sector.

Likewise, given the very significant risks associated with the technology development including very high prototype deployment costs and risks and a large number of potential technologies, consistency of funding for technology development is important, and it is likely that some of the more strategic risks will need to be carried by the state.

Ensuring the availability of appropriate skills is of course essential to the development of this sector. There has, been a focus on this area for a number of years and this should continue. Alongside the more general shortage of engineering skills, uncertainty about the scale and timing of developments in this sector can provide a barrier to skills available as people may be more inclined to work in a more established sector. From a regional perspective, those who develop skills locally may have to seek work elsewhere in the country or globally, and while this can prove skill enhancement and experience, lack of local employment may deter people from training to work in the sector.

Ensuring a clear regional development focus in this industrial strategy is important. Developing clusters and networks of those who have relevant skills in industry, at universities or other sites of research or are working in aligned industries is important, both for skills and knowledge sharing, and also to provide job opportunities for those already in the sector. Clusters of employment allowing for movement between jobs which makes a sector and location a more attractive employment prospect. This is particularly important in remoter areas with less concentrated employment which are often the site of many of these green growth technologies. Green technologies also have very significant potential for regions such as the Western Region and clustering or developing networks in these areas can contribute to the goal of more balanced regional development. Where a region is not yet ready for a more formal cluster, it remains important to develop networks and establish the contacts that will in future form the basis of the fully supported cluster. It is also possible to develop networks that align with existing clusters such as the Killybegs Marine Cluster allowing for transfer of knowledge and activity in a variety of areas.

While there has been an improvement in regulatory certainty, clear overarching objectives for regulation are important in particular where there are overlaps across regulations (e.g. climate action and planning, or energy and waste). Therefore, clear regulation and clear pathways and timelines for decisions (in whichever field) all improve information flows and make scaling easier.

## **Government Supports**

[7.Are there particular interventions from the Government or State agencies that should be considered to support the development of green technologies in Ireland? Are there existing supports that should be expanded or improved?](#)

While the focus of this consultation is on an industrial strategy for Green Growth one of the most important actions is to ensure a predictable policy environment and clear sectoral development pathways that provide certainty for those involved or becoming involved in the sector. Many of these technologies require very long term investment decisions which are based on projected demand and rely on other steps such as infrastructural investments to be completed. It is therefore essential that there is policy certainty.

In terms of the more innovative green growth technologies, providing test sites, test market access and pilot projects which are set up to understand challenges and develop processes as well as technologies all have a role to play as part of the industrial strategy.

The focus of this consultation is on an industrial strategy in Green Growth, and it aligns with DETE responsibilities, market development is essential to allowing the industry to develop. Providing clear market signals in this highly regulated market along with policy certainty is

essential to achieve successful development in the sector. This it is important that DETE continues to work with other government departments as part of this process.

#### 8. Are there existing supports that should be expanded or improved?

As noted above, test sites can present significant opportunities for enterprise and industrial development in a sector and the cancellation of the action in Powering Prosperity relating to test sites is disappointing. Quality test sites, such as that which was being developed in Galway Bay and the AMETS site, can provide important opportunities for both Irish and foreign enterprises operating in the sector and the potential for development of sub supply and supply chain enterprises. In addition to allowing for technology and equipment testing they also provide valuable insights into process and practices in the field.

In the Green Growth Industrial Strategy we need a focus on coordinating or enabling the development of test sites so as to allow Ireland to be associated with innovation that takes place in proximity to the testing locations. Future development of testing facilities, it is important to ensure that there are facilities and encouragement for cluster or network development adjacent to these sites and structured links with the wider research community in relevant universities.

There are important research opportunities associated with these green growth technologies and challenge funding for such research can help stimulate this. In addition, collaborative projects funded by the EU, under both HORIZON and various Interreg programmes provide Irish universities, researcher and enterprises with valuable opportunities to learn from and about relevant practices in other countries, and participation in quality projects should be encouraged.

As the focus of the Strategy has widened it would be useful to build on supports already offered by EI for both research and supply chair development. Where programmes are in development, broadening their potential participants to other technologies, or replicates previous supports in these other areas.

There is perhaps an opportunity for some elements of challenge funding to stimulate investment, or to provide a longer term backing than is easily available to markets, although we recognise this is complex to administer and operate in an area of rapid technological change.

#### **Aligned Sectors**

#### 9. Are there aligned sectors of the economy that this new industrial strategy should be seeking to support and develop to support our renewable energy and green transition ambitions?

Sectors which have a strong emphasis on engineering, marine and digital solutions can all potentially align with or provide solutions, skills and investments in the green growth technologies. In addition to areas which align with the specific technologies there are also opportunities for the provision of more generic skills and ancillary services as green growth industries develop.

#### 10. How can companies in these complementary sectors be identified and encouraged to broaden their work to include renewable energy and or green technologies?

It will be important to continue to raise awareness of the specific needs of the green growth sectors in the strategy in terms of skills, innovations and challenges. In addition to a broad promotion of the potential for green growth tech, it is essential to be specific about the types of

skills and engineering solutions which may be required in the Green Growth. Companies operating in other sectors may not be aware of the potential for overlap or expansion into the sector, but they are most likely to be attracted to specific opportunities rather than a more general promotion. However, one of the key challenges could be the slow development of supply chain in particular in relation to the more innovative technologies and enterprises may be hesitant to become involved where there is no clear long term pathway of demand.

### **International examples**

11. [Based on your experience, are there industrial development policy interventions from other countries that you consider particularly effective?](#)

As noted above, those countries or regions which have provided policy certainty and a clear backing for developments in this sector have benefitted from this approach.

Scotland is a leader in this area, especially in relation to ensuring that remoter regions benefit for the development of the sector. This is part of a long term Scottish approach in relation to renewables, which has applied for onshore wind, as well as biomass technologies.

Investment in infrastructure which have allowed for market development along with supports for training which allow skills to be transferred from other sectors, have all been useful. Green Freeport competitions in the UK provided an incentive for ports collaboration, and for the development of green technology parks in specific areas. Many of the actions are discussed here <https://www.gov.scot/publications/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition-2/pages/3/>

Of course, in addition to learning from international examples of successful industrial policy development in the green growth areas, there is also benefit in understanding what drove the successful development of significant industries and clusters in Ireland (such as the Galway medical device cluster) and seeing what transferable policy interventions or other actions might be applicable for green growth.

12. [If so, how might similar approaches be adapted to the Irish context?](#)

It is clear that a whole of government approach is key, and while the specifics of policy are important, the context in which the interventions are made is also key. Rather than being specific about particular policy actions it would be useful for DETE to examine the development approaches used in a number of comparable regions and to understand their context and how they could be made applicable in an Irish context. As has been mentioned throughout this submission, industrial policy is only one part of the process necessary to develop this sector. Looking at the processes and integrations of different policy drivers may also be useful as part of the development of this green growth strategy for Ireland.

### **SMEs**

13. [How can Ireland ensure that SMEs are well placed to participate in the development and deployment of green technologies related to the energy system in Ireland? Please note this is distinct from companies decarbonising or becoming more sustainable in their current practices and processes.](#)

As noted above there are very significant opportunities among many of the Green Growth technologies, but it can be difficult for existing SMEs, with their limited capacity, to become involved in the sector and its supply chains. It is likely that an emphasis on developing networks

which can both showcase the opportunities and also connect the small scale suppliers (of skills or tech) to those already established in the areas, either in Ireland or overseas. Sub supply or sub contracting are likely to be important steps for SMEs looking to become more involved in Green Growth technologies

## **Monitoring**

14. [How should Ireland monitor the development of these green technologies and identify emerging technologies and sectors in the future?](#)

As the opportunities and relative importance of different green growth technologies is likely to change in the coming decade with some become more established and others falling away, regular ongoing monitoring of the trends in these sectors and adjustment of policy focus in response to what is happening in the markets in this sector is essential. This is a period of rapid change, there is a high number of 'potential' technologies and it is important that there is flexibility for the government to respond to developing needs and to pull back in areas which are either well established and not in need of support, or which are less likely to be a part of green energy solutions in the future. In monitoring technologies, it is useful to have a particular focus on how they are being used in regions with similar characteristics to Ireland.

## **Other considerations**

15. [Is there anything else you would advise DETE to consider in developing this new industrial strategy?](#)

Powering Prosperity had a specific objective of balanced regional development and ensuring that the benefits of ORE would be spread across the country. The Green Growth Strategy needs to maintain the focus on how the projects and enterprises in this area can be enabled to provide economic benefits to the wider regions in terms of new high quality jobs and provide an important driver of balanced regional economic development.

## **Conclusion**

We welcome the opportunity to make a submission to the consultation on the Green Growth Industrial Strategy. The Western Region has important green growth opportunities, both on and offshore and It is important that this new industrial strategy stimulates development of this sector, spreading the benefits and ensuring a regional development focus is an important part of this.

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