

Irish Wind Energy Association,
Sycamore House,
Millennium Park,
Osberstown,
Naas,
Co. Kildare.

Department of Environment, Community and Local Government,
Custom House,
Dublin 1,
DO1 W6X0.

29th July 2015

By email to NationalMitigationPlan@environ.ie

Re: Invitation to Submit Views on the Development of Ireland's First National Low Carbon Transition and Mitigation Plan

Dear Sir/Madam,

The Irish Wind Energy Association ("IWEA") is Ireland's leading renewable energy representative body and as such has an active interest in the potential for renewable energy, and in particular wind energy, in Ireland. IWEA works closely as a stakeholder in the work of the Department of the Environment, Community and Local Government (DECLG) and so feel it is important to make a submission on the development of Ireland's first National Low Carbon Transition and Mitigation Plan and to contribute actively towards future strategy.

IWEA warmly welcomes that a primary objective of the National Mitigation Plan (NMP) will be to bring a clear and strong focus to both the challenges and the opportunities of transitioning to a low carbon future, and the importance of a positively focused and cost effective national transition agenda.

IWEA is firmly of the view that Irish wind energy as our leading renewable energy asset can, alongside other Irish renewables, make a continued valuable contribution to this national transition agenda and deliver a cost effective renewable option for Ireland's homes, communities and businesses.

We very much welcome this opportunity to make a submission and look forward to engaging constructively with you in the future as this proceeds.

Yours sincerely,

**sent by email, bears no signature*

Brian Dawson
Head of Communications
Irish Wind Energy Association

Introduction

In recent years Ireland has become heavily dependent on the importation of fossil fuels in order to meet its energy needs, with fossil fuels accounting for more than 85% of electricity generation in Ireland. This high dependency on foreign energy imports is unsustainable and Ireland is currently extremely vulnerable both in terms of meeting future electricity needs and ensuring price stability. Accordingly, the Department of Communications, Energy and Natural Resources' (DCENR) energy policy has been moving towards greater levels of self-sufficiency, with renewable energy being a key part of the Government's Energy Policy Framework 2007-2020.

Reducing Green House Gas Emissions & Meeting Global Commitments

Climate change continues to be one of the most serious global environmental challenges. Low-carbon electricity production is one of the most cost-effective methods of reducing greenhouse gases across the Agri-Food, Transport and Energy sectors. IWEA would urge DECLG to continue to pursue a reduction in national greenhouse gas emissions in line with our European and international obligations. We would ask that future policy development, including this NMP underpins the transition to a low carbon energy system, a low emissions economy and a sustainable society.

The international context of Ireland's low carbon work must also be brought to the forefront of the NMP. Within the 2020 EU Climate and Energy targets now on the horizon, the 2030 climate and energy policy under development, and the prospects of a global agreement on Climate Change to be reached later this year in Paris, it is vital that action on sustainable energy is pursued more urgently than ever.

The global focus on sustainable energy brings with it immense opportunities for Ireland given the resource we have in terms of our wind and other renewable capabilities. Ireland has sufficient accessible onshore wind energy resource to meet but also exceed our current renewable electricity target of 40% by 2020. In the longer term, Ireland has a landmass of around 90,000 square kilometres, and a sea area of around 10 times that size, at 900,000 square kilometres. Ireland's position at the Atlantic edge of the EU gives an almost unparalleled offshore energy resource, with suitable conditions available for the development of the full range of current offshore renewable energy technologies. Electrifying our energy requirement is therefore a logical route for Ireland.

The timeframe of the first NMP which will include the period to 2020 is a crucial period around the need to focus on the delivery of EU 2020 Climate and Energy targets. The period to 2020 and beyond to 2030 and 2050 also matches a period of sustained global efforts to tackle climate change through responsible energy use.

The Irish Government have also in October 2014 agreed new EU targets to 2030 which include a 40% Green House Gas emission cuts and a binding renewable energy target of "at least 27%". While the detail of these proposals must yet be confirmed through the EU's legislative process, Ireland must begin our planning beyond 2020 to ensure our level of climate ambition matches these 2030 goals.

Sectoral Mitigation - Electricity Generation

As a sector which is now over 20 years old, wind energy in Ireland has been developing in parallel with the growing understanding and acknowledgement of the importance of climate issues, security of supply concerns, and our Irish need to make a transition to a low carbon economy and power system. We are keen to bring this work and experience to the NMP.

IWEA welcomes the focus within the discussion document of the need to ensure that as well as reducing emissions associated with generation, that there needs to be a clear focus on enabling the incorporation of new technologies and lowering the cost of existing technologies.

IWEA is clear that in order to achieve this focus there must be stability and consistency in the supporting legal, regulatory and environmental policy areas. This policy stability is vital to drive investor confidence and to support inward investment in the technologies necessary for Ireland's electricity generation sector to further develop our low carbon credentials.

Delivering Economic Value within Electricity Generation

IWEA welcomes the central focus which has been placed on economic considerations within the outline paper and the focus on maintaining competitiveness. We would strongly echo the statement within section 7 of the outline paper, that the policies as set out under the NMP; *“should instil confidence in industry to invest in new technologies to bring about the necessary scale of change required, with the general public also playing their part in this change.”*

With Ireland now progressing towards recovery, the issue of economic value and securing the most cost effective solutions to our low carbon transition is vital for business and energy citizens. Within the electricity generation sector, wind energy is proven to deliver the most cost effective renewable electricity for Ireland.

The continuing integration of wind energy onto the Irish grid is assisting in reducing the amount of fossil fuel generators used to produce electricity, which is typically more expensive than that generated from renewable sources.

A recent wholesale market report¹ based on EirGrid statistics has shown that for the first half of 2015 wind energy has delivered 25% of Ireland's electricity demand, and with that strong delivery of wind energy the average wholesale price of electricity in the Irish market for the first six months of 2015 was 5.35c/kWh – down 9 per cent compared with the same period a year earlier.

The Value of Wind Energy to Ireland study² published in March 2014 by Pöyry, a leading international consulting and engineering consultancy, and Cambridge Econometrics. The analysis shows that if Ireland deploys wind capacity to meet 2020 targets the wholesale price will fall by €2.10/MWh by 2020 and that wind energy does not place a burden on the Irish consumer due to the net economic benefits of wind energy development. The European

¹ <http://vayu.ie/2015-half-year-energy-report-23-increase-wholesale-gas-prices-compared-with-2014/>

² <http://www.iwea.com/index.cfm/page/industryreports?twfid=1467&download=true>

Commission confirmed in its Working Document on Energy Prices and Costs³ that *“for wind electricity in Spain and Ireland the benefits for electricity consumers in terms of reduction in whole-sale prices outweigh the costs of subsidies.”*

Furthermore the report entitled “The Value of Wind Energy to Ireland”⁴, showed that if Ireland meets its 2020 targets using wind energy this will bring €3.5 billion of direct investment into the economy, contribute considerably to economic growth and provide at least €1.8bn additional cumulative tax revenue to the Irish State.

There are also associated positive economic and FDI impacts from the availability of wind and renewable energy in Ireland. The requirement for large scale data storage is growing year on year and data centres will be at the core of the 21st century economy. Given their considerable electricity consumption, internet giants, such as Facebook, Apple, Amazon, Intel, are increasingly looking to power their data centres using clean and renewable power sources, which constitutes a massive opportunity for Ireland, which has clean wind energy in abundance. Already 2015 has seen investments totalling over €1bn from Facebook and Apple in 100% renewable powered data centres, which are premised on the clear availability of Irish renewable energy.

Expanding our Renewable Energy Opportunity

As the vast majority of new renewable capacity will be provided by on-shore wind, the 40% target is a significant challenge for the Irish wind industry as a whole. In June 2015, Ireland’s total installed wind capacity was 2,395MW, generated from over 195 wind farms and with the capacity to supply electricity to over 1.5 million homes.

This expansion of Irish renewable energy capacity in a relatively short period of time will present a challenge for local authorities, not just in the processing of planning applications for wind farms and grid connections, but also in terms of the strategic identification and zoning of lands suitable for wind farm development. IWEA is clear that along with a necessary consistency of policy environment, that further support should be provided to Local Authorities in developing strategic approaches to fulfilling their renewable energy potential, and this should be done in line with the Methodology for Local Authority Renewable Energy Strategies (LARES) as developed by the Sustainable Energy Authority of Ireland (SEAI).

It should be noted within the NMP that the sustainable and sensitive expansion of the Irish wind and renewable energy sector will be an extremely positive economic development for Ireland and will result in greater grid security and stability, job creation, lower energy prices and as mentioned above to bring about a reduction of Green House Gas (GHG) emissions.

Sectoral Mitigation - Built Environment

Concurrently we are likely to see a probable future which will require the necessity of a combination between sufficiency, efficiency and renewables.

³ <http://register.consilium.europa.eu/doc/srv?!=EN&t=PDF&f=ST+5599+2014+ADD+6+REV+1>

⁴ <http://www.iwea.com/index.cfm/page/industryreports?twfid=1467&download=true>

The further increased electrification of heat and transport are both key necessary developments for the next period. With this in mind and in line with the EU roadmap, we would further call for a key focus to be the electrification of heating and transport. By electrification of heating, cooling and transport, for example through employing highly efficient heat pumps and electric vehicles, Ireland's primary energy requirement may be reduced while at the same time providing a larger market for all of our surplus renewable electricity to be used and stored.

Retrofitting of the existing housing stock is very important for Ireland in terms of improving our energy efficiency and reducing our carbon output. It has the added benefit of reducing expensive imports of fossil fuel and providing much needed employment. It is essential that investment in energy retrofitting schemes continues in order for Ireland to achieve the EU 2020 energy efficiency target.

There are certainly barriers however which need to be overcome to radically increase the rate of home retrofitting and we strongly support moves to ensure effective retrofitting. IWEA Members have themselves shown leadership in this regard through the provision of Community Benefit schemes specifically focused on enabling and supporting retrofitting at local levels in communities and facilities around wind farms.

Consideration needs to be given to how energy efficiency in general is incentivised. There is a need to ensure no unintended consequences.

The promotion of domestic renewable generation also needs to be supported, for example the use of wind microgeneration. Many issues are limiting the wide uptake and acceleration of the installation of micro and small wind generation systems in Ireland at a time when the global drive is to decrease every country's dependence on fossil fuels by significantly increasing energy production from natural resources. In particular issues concerning the capital cost of equipment and information on suppliers and installers of equipment need to be addressed. It is essential that the energy citizen is empowered to play an active role in carbon mitigation.

Sectoral Mitigation– Transport

We must also continue to promote Electric Vehicles (EVs) to move to similar levels of uptake reached in other EU countries. In recent years, electric vehicles have made important progress on a number of fronts. Perhaps most importantly, there is an increasingly diverse range of vehicles available to car buyers, and both consumers and leading automotive publications rate the vehicles highly.

And while EVs still occupy a small share of total passenger vehicles sales, year-over-year growth has continued momentum and so far according to the Society of the Irish Motor Industry SIMI the first five months of 2015 has seen more than double the amount of electric cars sold over the same period in 2014. We also welcome consumer awareness raising initiatives such as the ESB-led "Great Electric Drive" and new legislative approaches empowering Local Authorities to specifically designate EV parking spaces to facilitate charging⁵.

⁵ <https://www.esb.ie/electric-cars/electric-car-news-and-events/electric-car-press-releases/EV-Designated-Spaces-in-Limerick-press-release.jsp>

Here in Ireland we see several challenges to widespread adoption of vehicles powered by electricity still clearly exist. These challenges fall into three main categories: high initial vehicle cost; consumer acceptance; and infrastructure. While overcoming existing challenges may improve the penetration rate of electric vehicles, true success will require a more coordinated framework. The policy and regulatory environments need to be purposefully aligned with making owning and operating an electric vehicle easy. Installing home infrastructure, being able to find and use publicly available charging stations, understanding the economics of operating a PEV, and being aware of the incentives for vehicle purchase are all critical pieces of information that must be aggregated and shared with consumers. The real benefit from electric vehicles will arise when there is a large amount of renewable electricity generation and the use of EVs can play an important role in responding to and helping to manage increased levels of renewable generation.

Sectoral Mitigation– Agriculture

Aside from the quality of the produce, one of the main selling points of Ireland’s agricultural produce abroad is its clean environmental image. It is clear that caring for the environment must not be seen as a cost against competitiveness.

Food Wise 2025, the report of the 2025 Agri Food Strategy Committee has set out the strategic plan for the development of agri-food sector over the next decade. Significantly within *Food Wise 2025* there is a clear recognition of the need to consider the environment and economic competitiveness as equal partners. This approach must be reflected and built upon within the NMP.

IWEA is clear that progress towards developing Irish renewable energy sources and Irish reductions in agricultural emission can act as two sides of the same coin in working towards meeting our climate objectives.

The role of the National Expert Advisory Council on Climate Change

IWEA has welcomed the establishment of the National Expert Advisory Council on Climate Change under the Chair of John Fitzgerald. We are confident this body will be able to provide a clear non-partisan appraisal of annual progress being made in reducing greenhouse gas emissions, and to provide direct advice and recommendations to the Minister in furthering the low carbon transition process for Ireland.

IWEA would welcome an active engagement in the transparent work of the Expert Advisory Council and offer our positive contribution as the largest renewable representative body in Ireland to the work of this Council.

Conclusion

The International Panel on Climate Change has put forward its clear assessment that the window for action on climate change is rapidly closing and that renewable energy sources such as wind energy will have to grow from 30% of globally electricity at present to 80% by 2050 if we are to limit global warming to below 2 degrees.

With this in mind we would echo the view stated by Minister Kelly that *“As a nation we must do everything in our power to curb our emissions”* and ask that the need for urgent climate action and emissions reductions be clearly emphasised and prioritised within the MNP.

IWEA has absolute confidence that with the vision and commitment of all government bodies, a joined-up strategy as set out through a National Mitigation Plan, and alongside the advice of the Expert Advisory Council, to deliver this we will not only reach our 2020 targets but in doing so will create jobs, investment, reduce carbon emissions and future-proof our energy system.

IWEA would welcome policies and objectives that explicitly illustrate our national move towards indigenous renewable energy, maintain a consistency of policy framework, work to ensure our indigenous energy security of supply, and develop collaborative initiatives which clearly illustrate and educate about how such a transition to a low carbon economy can continue to be moved forward.

We thank you again for the opportunity to contribute to the NMP at this early stage and we look forward to further engagement on the subsequent consultations on the draft NMP.