

Department of the Taoiseach, Government Buildings, Merrion Street Upper, Dublin 2, D02 R583

22 February 2021

Emailed to: nrrpconsultation@taoiseach.gov.ie

RE: Public Consultation on Ireland's National Recovery and Resilience Plan

Dear NRRP team,

Wind Energy Ireland (WEI) welcomes the opportunity to engage with the Department of the Taoiseach on Ireland's National Recovery and Resilience Plan.

WEI is the new name for the Irish Wind Energy Association and is largest representative body for the Irish wind industry, working to promote wind energy as an essential, economical, and environmentally friendly part of the country's low-carbon energy future.

WEI would like to put forward a number of positions responding to the questions posed by the public consultation on Ireland's National Recovery and Resilience Plan.

Q1. Taking into account the guidance provided by the European Commission, what are the areas Ireland should prioritise for 1) investments and 2) reforms for inclusion in our National Recovery and Resilience Plan?

The European Commissions' 2021 Annual Sustainable Growth Strategy outlined four dimensions that need to be addressed in the recovery from the COVID 19 pandemic: the Green Transition; the Digital Transition and productivity; fairness; and macroeconomic stability. The European Commission also specifically outlined renewables as a flagship area for reform and investment. These dimensions should guide all investment decisions, which will help to avoid expensive stranded assets and ensure priority areas are addressed.

Renewables and wind energy in particular can contribute hugely to these dimensions by helping to decarbonise our energy system while simultaneously providing employment all over the country including in more rural areas where it can help to correct regional imbalances — and by driving the recovery of the economy post-COVID.

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It is also important that spending is aligned with Ireland's National Energy and Climate Plan, which sets a target of 70 per cent renewable electricity by 2030, generated by 3.5 GW of offshore renewables (to be revised up to 5 GW in line with the Programme for Government), 1.5 GW of grid scale solar and 8.2 GW total of onshore wind capacity by 2030¹.

Some of the benefits to reaching the 70 per cent milestone are outlined in Table 1 below.

Delivering the renewable generation infrastructure to achieve the target will require approximately €12 billion of investment² and will create ~6,000 direct jobs in Ireland, which is estimated here to create an additional ~9,000 indirect jobs.

Just as importantly – if not more so – is the impact reaching 70 per cent will have on our emissions, by replacing fossil fuels with clean, indigenous electricity. Reaching 70 per cent renewable electricity will drive our emissions from electricity generation down from ~ 12 MT CO2 per year to 4-5. In 2019 alone, the use of renewables in electricity avoided 4.8 million tonnes of CO2. At the same time, this avoided an estimated €297 million in fossil fuel imports³.

If sufficient investment is forthcoming to enable just 3.5 GW of Ireland's 16 GW offshore wind pipeline to be delivered for 2030, these projects will bring a lifetime spend of €17.9 billion4 on supply chain provision which will bring benefits to local economies. However, these is an opportunity to significantly increase the amount of this investment that can be captured by Irish firms and workers.

To do this, and to reach 70 per cent renewable electricity, investments will be needed.

¹ https://www.gov.ie/en/publication/0015c-irelands-national-energy-climate-plan-2021-2030/

² Based on typical investment costs -

https://ens.dk/sites/ens.dk/files/Statistik/technology_data_catalogue_for_el_and_dh_-_0009.pdf

³ https://www.seai.ie/publications/Energy-in-Ireland-2020.pdf

⁴ https://windenergyireland.com/images/files/final-harnessing-our-potential-report-may-2020.pdf



Table 1 – Benefits to reaching 70 per cent renewable electricity by 2030

Metric to Achieve 70by30	Onshore Wind	Offshore Wind	Solar	Notes
Installed Capacity by end of 2020 (MW)	4,200 MW	25 MW	0 MW	40% RES-E target for 2020 was met.
Additional Capacity in 2030* (MW)	4,000 MW	3,500 MW	1,500 MW	Capacities identified in the Climate Action Plan (CAP)
Total Investment (Billion euro by 2030)	€5 Billion (very accurate)	€6-7 Billion (very accurate)	€500 Million (very accurate)	Based on typical investment costs ⁵ . Excludes investment in supporting technologies such as batteries and interconnectors.
Carbon Savings (Mt/year by 2030)	~3.5 Mt (very accurate)	~4 Mt (very accurate)	~0.5 Mt (very accurate)	CAP found that 70% RES-E will save 7-8 Mt/year out of a total ambition in the CAP of ~16 Mt ⁶
Avoided Natural Gas Imports (Million euro per year by 2030)	~€500 Million (very accurate)	~€600 Million (very accurate)	~€75 Million (very accurate)	Assuming all natural gas for electricity generation is imported and a forecasted gas price of 63 p/therm in 2030
Additional Direct Jobs (for new capacity only)	2,000 ⁷ (very accurate)	2,500 (very accurate)	1,500 ⁸ (estimate)	Onshore & offshore numbers are based on bespoke research in these areas. Solar is an estimate based on international experiences.
Indirect Jobs (for new capacity only)	4,000 ⁹ (accurate)	3,500 (estimate) ¹⁰	1,500 ⁸ (estimate)	Onshore wind numbers are based on a study from 2010, so it needs to be updated, but provides a guide. Offshore numbers assume the same rate as onshore and solar is an estimate based on international experiences.

⁵ https://ens.dk/sites/ens.dk/files/Statistik/technology data catalogue for el and dh - 0009.pdf

⁶ https://www.dccae.gov.ie/documents/Climate%20Action%20Plan%202019.pdf

⁷ Based on economic research on the number of jobs created per MW of installed capacity contained in the Siemens 2014 report *An Enterprising Wind: An economic analysis of the job creation potential of the wind sector in Ireland*. The ratio of 0.5 jobs per MW installed is the **most conservative** of the predictions made.

⁸ Assuming 1 job per MW based on Figure 11 here for both direct and indirect jobs: https://www.solarpowereurope.org/wp-content/uploads/2018/08/Solar-PV-Jobs-Value-Added-in-Europe-November-2017.pdf

⁹ Based on a study from 2010 which concluded that Ireland creates 1.5 jobs per MW in total in Ireland from wind energy, so assumed here that 0.5 per MW are direct and 1 per MW are indirect: https://www.iwea.com/images/files/9660bd5e72bcac538f47d1b02cc6658c97d41f.pdf

¹⁰ Assuming the same indirect benefits as for onshore wind



Port Infrastructure and Supply Chain

Research recently completed by the Carbon Trust examining the potential for Ireland's offshore wind energy supply chain found that currently – at best – Irish firms would be able to attract only 22 per cent of the lifetime multi-billion euro investment. The report set out how this could quickly grow to 31-36 per cent and eventually as much as half of the estimated €17.9 billion of investment associated with the 3.5 GW target.

Critical to this will be identifying a port on the east coast to facilitate the construction of offshore wind farms, creating an enterprise zone around this port (which has proven effective in the UK) and simultaneously supporting training in the sector via the Skillnets or Future Jobs programmes.

Investment in other physical infrastructure that is needed by the wind energy supply chain will also generate economic activity and unlock jobs. This includes upgrading roads and bridges and that are critical for the transportation of wind energy equipment.

Energy and transport networks

The State should also prioritise investment in energy and transport networks which will support the transition to a low-carbon economy. In particular:

- 1. The electricity grid will need to be expanded a lot in the coming decades, to accommodate at least twice the power used today i.e. >70 TWh compared to 30 TWh today. EirGrid and ESB Networks have budgets to expand the wider electricity network, but homes and businesses may need support also as demand in buildings increases particularly with the electrification of heat and transport via heat pumps in rural areas and electric cars respectively.
- 2. District heating can connect heat that is currently being wasted to homes and businesses that need it, instead of using natural gas and oil for their heating. An investment of €50 million per year needs to be allocated in capital funding to the construction of district heating networks in towns and cities. This will enable Ireland to implement enough low carbon district heating each year to convert 1% of Ireland's heat demand in buildings each year, thus saving ~80,000 tons of carbon and millions of imported fossil fuels each year.
- 3. By incentivising electricity (i.e. heat pumps and the electric grid) and district heating, gas network roll out may no longer be required to heat buildings in the residential and commercial sectors, as low-carbon alternatives will then be available. Gas networks may still be required for high-temperature industrial applications and power plants in the electricity sector, but only where clearly suitable from a zero-carbon economy context. At present, it is not clear how fossil fuel gas will be replaced with low-carbon gas and until it is, expanding the gas network even further should only be done where absolutely necessary.



In addition to the underlying capital infrastructure, it is also vital that sufficient funding is allocated for the operation and maintenance of this infrastructure over its lifetime, by resourcing the entity responsible sufficiently. In particular, EirGrid and ESB Networks need adequate resourcing for the electricity grid, a new entity needs to be established for district heating, which could involve reassigning some resources currently used for gas networks as their roll-out declines. With more capital infrastructure, An Bord Pleanála and Local Authorities will also need more resourcing as more planning applications need to be assessed and specific skillsets required, particularly in relation to offshore wind.

Reforms to the Planning and Permitting system

Planning difficulties in Ireland are slowing down the pace of renewable energy development and pose challenges to the national priority of reinforcing the transmission system. An effective planning system and a stronger transmission grid will together provide the foundation for a modern electricity system which will rely on renewable energy to power our homes, our economy and our society. A typical wind energy project currently takes between 8 to 12 years to clear the consenting process and to be built. This can only be improved through reform and, more importantly, adequate resourcing. Our analysis on business as usual timelines for wind farm development in our Building Onshore Wind report clearly shows planning delays are one of the biggest barriers to decarbonising Ireland's electricity supply¹¹.

WEI urges a series of changes to speed up the planning process and our priority recommendations include:

- Planning decisions need to be made faster, particularly timelines for appeals to An Bord Pleanála, which are currently an average of 59 weeks instead of the Board's own 18 weeks statutory objective;
- The current wind energy planning guidelines need to be finalised based on rigorous scientific
 evidence and must strike the right balance between the need to develop new wind farms and the
 concerns of those opposed to renewable energy;
- Introduce pre-planning consultation for Strategic Infrastructure Development (SID) applications and streamline the process for deciding on applications for SID status.

Our proposed solutions identify the most important areas of planning system that require reform. However, to achieve our suggested reforms, the issue of adequate resourcing must be tackled. The allocation of Government resources has always been a difficult issue. But, given the accelerated impacts of climate change and our increased EU targets, any Departmental strategy must make adequate staff and resources available to local authorities and ABP.

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¹¹ IWEA, (2020). 'Building Onshore Wind: 70 by 30 Implementation Plan' Link: https://iwea.com/images/files/iwea-building-onshore-wind-report-lr.pdf



Education and Skills

Future jobs Ireland 2019 states that to meet Ireland's climate goals a step change of decarbonising our economy is required over the next decade. It will require entire sectors of the economy to undergo radical changes and create new types of enterprises and jobs. Furthermore, the report also includes the Action Plan for Rural Development and has identified significant potential in sectors such as agriculture, food, forestry, tourism and renewable energy sectors which are important local employers. The plan also encourages the diversification of rural economies to build resilience, create additional jobs in rural areas, and to maximise the opportunity to link employment to emerging issues such as climate change and managing sustainable land use.

Meeting our decarbonisation ambitions will need investment in and development of new skills and employment initiatives to drive Ireland's competitiveness, enterprise and innovation.

More recently the European Green Deal¹² has set out an action plan for moving to a clean, circular and climate resilient economy by 2050. Wind energy will be a key instrument in Europe delivering the Green Deal and sustainably growing the green economy and green recovery in the aftermath of the Covid-19 pandemic. The EU Recovery Plan aims to rapidly accelerate relatively new technologies such as the offshore wind sector in Europe. Through its plans and investment via grants and loans, aimed at recovering from Covid-19, the plan aims to modernise the EU economy and transition from fossil fuels in a just manner. The development of skills around this transition will be critical to its success.

This is reflected within Ireland's recovery plans also. The Irish Government has placed a jobs-led recovery at the centre of its Programme for Government and investment and the aim is to create 200,000 new jobs by 2025 as well as helping people currently unemployed due to COVID-19 back to work. The aim is to build a stronger, fairer and more sustainable economy prepared for the next phase of disruptive technologies on a pathway to a low-carbon future and create an economic opportunity through climate action. The Government have established a Recovery Fund focussed on infrastructure development, reskilling and training and supporting of investment and WEI believes that wind energy and renewable energy more broadly should be considered central to Irelands recovery plans.

The Carbon Trust report 'Harnessing our Potential' highlights the potential for approximately 2,500 direct jobs in Ireland to be created during the development & construction of 3.5 GW of offshore wind with the majority of these jobs created between 2025 - 2030. A further 700 jobs over the operational lifetime of these wind farms and 1,300 jobs during the decommissioning stage of these projects between 2050 - 2055 is also envisaged. However, the level of Irish and locally based jobs will be dependent on the availability of the required people and skills in Ireland. The report identifies skill shortages within a number of areas in the potential Irish offshore wind supply chain but none more so

content/EN/TXT/?qid=1596443911913&uri=CELEX:52019DC0640#document2

¹² https://eur-lex.europa.eu/legal-

¹³ https://windenergyireland.com/images/files/final-harnessing-our-potential-report-may-2020.pdf



than within engineering, financial services and logistics & operations. There will be a need for investment to train the required number of people and develop the necessary skills to maximise the level of employment created in Ireland from the developing offshore wind sector.

The ambition being shown across Government with regard climate action and associated skills development in recent years is welcomed by WEI. We support the creation of a single Department encompassing further and higher education, research, innovation and science and see this as critical for strategic policy direction for the sector. However, implementation is now the challenge and key investment decisions and design of initiatives across growth areas are required urgently.

Skillnet Ireland is an excellent example of a successful initiative with support from Government and industry. Skillnet Ireland is a business support agency of the Government of Ireland with a mandate to advance the competitiveness, productivity and innovation of Irish businesses through enterprise-led workforce development and in preparation for the future world of work. Supporting climate action and the energy transition are central to Skillnet Ireland's growth in the coming years and WEI are the contracting organisation for one of Skillnet Ireland's training networks, Green Tech Skillnet. WEI members have successfully completed impactful and relevant upskilling and training over the past decade through our network and this has been a key element in the success, competitiveness and growth of the wind industry throughout this period.

We believe the continued support and growth of the Green Tech Skillnet through Skillnet Ireland and through the support of our members should be considered a priority by Government as we look to prepare and upskill Ireland's workforce for the future world of work through the greening our economy.

Reform of the Corporate PPA Market

Reforms will be needed to support the Corporate Power Purchase Agreement market and to make the target to meet 15% of electricity demand by renewables contracted under Corporate Power Purchase Agreements realistic.

A number of actions will be needed to resolve commercial and regulatory barriers and maximise renewables build out.

WEI is currently working on a position paper on this subject and would be happy to engage further.

WEI believes that investment and reform in these key areas will be crucial to Ireland's recovery.



Q2. Of the Country Specific Recommendations received by Ireland in 2019 and 2020, which are considered the most relevant for reflection upon in Ireland's National Recovery and Resilience Plan?

WEI believes that all of the Country Specific Recommendations received by Ireland have merit and should be given due consideration. Those received in 2020, with the pandemic in mind, should of course be given priority at this stage. WEI would like to highlight a number of points that it feels should be among those first to be addressed.

Recommendation number 1 – effectively address the pandemic and sustain the economy and support the ensuring recovery – will of course be a key immediate concern for the Department. It is crucial that all investments in the coming years are made wisely to ensure any economic impacts from the pandemic do not have long-lasting effects. WEI has outlined in the previous section how wind energy can be at the heart of the economic recovery from COVID 19, and some of the investments and reforms needed to facilitate this.

Recommendation number 2 – support employment through developing skills – will also be crucial. With unemployment rising due to the pandemic, many workers will need to up-skill or re-skill to regain secure employment. Renewable energy, and wind energy in particular, provide the perfect opportunity for this. Reaching 70 per cent renewable electricity could provide 6,000 jobs by 2030.

In the longer term, employment numbers from renewables could be much higher. A recent report has highlighted that floating offshore wind has the potential to create up to 20,000 jobs in manufacturing and a further 10,000 industry jobs by 2050 through staging, installation, operations and maintenance of wind farms off the West coast alone¹⁴. It is important that the right investment decisions are taken now to capture these benefits.

Recommendation number 3 calls for the front loading of public investment projects and a focus on the green transition. Again, this will be key. The economy will need stimulus in the short term to ensure no long-term damage from the pandemic. Renewables, and the infrastructure needed to facilitate adequate build out of same, provide an excellent avenue to provide stimulus to the economy, attract investment and support significant employment, while at the same time ensuring investments are future-proofed, and that Ireland is a leader in the green transition.

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¹⁴ https://www.sfpc.ie/wp-content/uploads/2020/12/Shannon-Estuary-Offshore-Wind-GDG-November-2020.pdf



Conclusion

In summary we again thank the Department of the Taoiseach for the opportunity to respond to the consultation. We hope you will take account of our comments and suggestions in the final submission to the EU, and we are available to discuss any comments or questions you have in relation to our response.

Best Regards,

Noel Cunniffe

Deputy CEO, Wind Energy Ireland