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# NATIONAL CLEAN AIR STRATEGY

**SUBMISSION TO PUBLIC CONSULTATION** 

Submitted by:
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Air Quality Division
Department of the Communications, Climate Action & Environment
Newtown Road
Wexford
Y35AP90

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#### Re: Public Consultation on the National Clean Air Strategy

To Whom It May Concern,

The following document sets out the views and observations of the Irish Wind Energy Association (IWEA) on matters covered in National Clean Air Strategy as part of the public consultation announced by the Minister for Communications, Climate Action and Environment Denis Naughten TD on 1st March 2017.

IWEA is the leading renewable energy representative body in Ireland and as such has an active interest in the potential for renewable energy, and in particular wind energy, in Ireland. IWEA works in a proactive and engaging manner with stakeholders in this area and as such feels it is both appropriate and important to make this submission.

IWEA very much welcomes the opportunity to participate in the public consultation process and looks forward to engaging constructively with policymakers as the strategy is progressed.

Sincerely,

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### Introduction

In recent years Ireland has become heavily dependent on imported fossil fuels to meet its energy needs. Ireland's high dependency on foreign energy imports is unsustainable and leaves Ireland vulnerable both in terms of meeting future electricity needs and ensuring price stability. The burning of fossil fuels is also harmful to Ireland's air quality which has a direct impact on public health.

However, increasingly, renewable energy sources, particularly onshore wind, have added significant capacity and greater levels of self-sufficiency. This can continue in the years ahead with clear, credible, evidence-based policy making. Wind energy is an affordable, reliable, non-emitting, verifiable, electric generation method for significantly reducing air pollution.

Ireland has the capacity to benefit greatly from an ambitious renewable energy agenda. There are also associated positive economic and health impacts from the availability of wind and renewable energy in Ireland.

Ireland can be a world leader in renewable energy generation and renewable energy technology. The decarbonisation of the Irish economy represents enormous challenges for policymakers, industry and society. However, IWEA believes this is a journey worth undertaking for Ireland and it will result in greater employment, health, research and technology benefits for future generations.

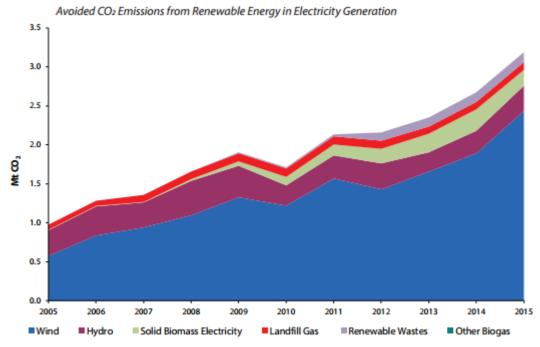
#### **Overview**

Four deaths per day can be attributed to air pollution in Ireland. How Ireland produces the energy required for the country is directly linked to the quality of the air we breathe. Electric generation from fossil fuel-fired power plants is a leading source of air emissions that harm human health and contribute to global climate change.

One of the obvious benefits of wind energy is that the production of electricity from this source involves zero direct emissions of air pollutants. In contrast, fossil fuel-fired electric generation from coal, oil, or natural gas results in substantial direct emissions of numerous air pollutants that have adverse impacts on public health and the environment.

Wind energy is an affordable, reliable, non-emitting, readily quantifiable and verifiable electric generation method for significantly reducing air pollution, including emissions of carbon dioxide (CO2), nitrogen oxides (NOx) and sulphur dioxide (SO2).

Asthma and Chronic Obstructive Pulmonary Disease are among the most serious issues that face the Health Service in Ireland every year. Both conditions are heavily impacted by air quality. IWEA recognises that Ireland's energy use relates directly to the quality of air we breathe daily and as such we believe increased use of renewable energy, in particular wind energy, will reduce harmful emissions through the use of fewer fossil fuels for power generation.



Source: SEAI

The increased use of wind energy in Ireland is already displacing CO2 emissions and improving air quality in Ireland. Urban centres will continue to see higher concentrations of Nitrogen oxides (NOX). NO2 concentrations are closely linked to traffic volumes. Sensitive individuals including asthmatics, the elderly and children are more susceptible to NO2 exposure in heavily trafficked areas.

The table below shows the emission levels for SO2 and NOx in 2014 as well as the 2010 ceiling limit set in the Directive 2001/81/EC.

|                 | 1990<br>(kt) | 2014<br>(kt) | 2010 Ceiling<br>(kt) | % above 2010 Ceiling |
|-----------------|--------------|--------------|----------------------|----------------------|
| NO <sub>x</sub> | 140          | 74.7         | 65                   | 14.9%                |
| SO <sub>2</sub> | 183          | 19.3         | 42                   |                      |

Source: EPA

"SO2 levels in Ireland fell by 89% between 1990 and 2014. Emissions from power generation fell by 94% over the period as a result of the installation of abatement equipment and the switch from oil to natural gas.

Reductions in the order of 81% in SO2 emissions in the residential and services sectors and an 90% reduction in industry were achieved over the period through the use of low sulphur coal and a switch to natural gas from oil." – SEAI, Energy in Ireland 1990–2015

Transport, largely road transport, is the main source of NO2 emissions, accounting for almost 60% of the total in 2014. Due to our continued reliance on fossil fuelled combustion engine transport Ireland will have concentrations of NO2 as a pollutant in towns and cities in the future. IWEA believes Ireland must secure the transition of people's use of private fossil fuel powered vehicles to alternative modes of transport including cycling, walking and large scale public transport. IWEA supports Ireland's transition to more environmentally friendly and sustainable transport options and supports initiatives being undertaken by policymakers including the use of electric powered vehicles.

IWEA believes in increased public and community engagement and education on wind energy and the positive benefits that can be achieved for society in terms of the economy, the environment and air quality. Wind energy is scalable and rapidly deployable, and as a result is ideal as an emissions reduction tool.

The increasing demand for energy in Ireland as a result of growth in the economy shows there is a need to provide more renewable energy sources to support this. Official data published by SEAI on 2015 shows 25.3% (22.8% wind) of Ireland's electricity came from renewables. This will continue to increase in the years ahead.

## Conclusion

The Irish Wind Energy Association supports Ireland's first National Clean Air Strategy, "Cleaning our Air". This strategy provides a clear framework for government both in terms of policies and actions to reduce harmful emissions in Ireland, improving air quality and public health.

Health experts have documented that pollutants from fossil fuel based power generation can result in a wide range of serious health effects. These adverse health effects include lung cancer and other respiratory difficulties including asthma. In general air quality in Ireland is good and compares favourably with other European countries. However, improvements can be made as Ireland pursues a policy of decarbonisation.

IWEA believes wind energy can play an even greater role in reducing emissions going forward. Wind energy can continue to rapidly scale up in the years ahead and wind energy is affordable as costs are declining dramatically.

IWEA believes a clear national policy that explicitly supports increased indigenous renewable energy, including wind, is essential for Ireland. This will support the National Clean Air Strategy and continue to improve air quality in the country. Significant steps are required in the transport sector but IWEA believes large-scale change can be achieved with leadership in government and industry, at national and local level.



For more details on any of the issues in this document please contact:

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