



IRISH DOCTORS FOR THE ENVIRONMENT

Introduction

We would like to firstly acknowledge the work that has been done by the Irish government in this area, and in particular recognise the foresight displayed in 1990 when a landmark Smoky Coal Ban was introduced, a measure increasingly recognised internationally as a key measure in our efforts to combat air pollution. It is estimated that approximately 8,000 premature deaths have been averted in Dublin since the introduction of the smoky coal ban in 1990. There is an opportunity now to expand the health benefits of this ban to the entire nation and to lead internationally on the control of solid fuel combustion.

Solid Fuels and their impact on Air Quality

Our legal limits for fine particulate matter are over twice as high as those recommended by the World Health Organisation. This is predominantly from domestic solid fuel burning and highlights the need to limit the use of solid fuels in Ireland (O'Dwyer, 2018).

Solid Fuels and their Impact on the Health of the Irish Nation

Solid fuel burning is the main source of air pollution in Ireland through the production of particulate matter air pollution. This particulate matter is estimated to be responsible for the deaths of 1300 people annually in Ireland (EEA, 2019). Internationally, air pollution has been associated with a wide range of diseases across all age groups such as asthma (Guarnieri and Balmes, 2014) and other lung diseases (Duan et al., 2020); heart diseases (Kwon et al., 2019, Mustafic et al., 2012, Shah et al., 2013) and stroke (Shah et al., 2015); dementia (Peters et al., 2019), Parkinson's disease and other neurodegenerative diseases (Kasdagli et al., 2019); along with many other diseases as well (Hathout et al., 2006, Sigaux et al., 2019, Wu et al., 2020). Interestingly for Ireland, international evidence would suggest that there is no lower limit to the effects of air pollution on mortality i.e., there is no safe lower limit for air pollution (Liu et al., 2019). There are clear pathophysiological mechanisms identified for this including direct inflammation of the lungs and the systemic inflammatory effects of this, translocation of particles from the lungs and other organs into the bloodstream and carriage to other organs with direct effects there, and activation of the autonomic nervous system causing dysregulation of the body's systems (Brook et al., 2017).

Numerous studies have demonstrated the effect of air pollution on our health in Ireland. In their seminal paper of 2002, Clancy et al. demonstrated a reduction in respiratory and cardiovascular mortality when the smoky coal ban was brought in in Dublin in 1990 (Clancy et al., 2002). This is now estimated to have saved 8000 lives since its introduction 30 years ago. More recently studies have demonstrated an association with different diseases and air pollution in Ireland. (Courmane et al., 2016) demonstrated an association between respiratory mortality in an inner-city hospital and ambient particulate matter levels. (Quintyne et al., 2020) found an association between air quality levels in Dublin and admission rates for cardiovascular and respiratory disease over the following three days post exposure. Interestingly (Maher et al., 2021) in a study of the TILDA database found that older people who had open fires at home were at a higher risk of getting dementia than people who did not.



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Finally, (Byrne et al., 2020) demonstrated an association between short-term stroke admissions and particulate matter pollution during winter in Dublin and Cork. This association would imply that winter solid fuel burning in these areas that already have a smoky coal ban is causing this increase in stroke admissions.

Thus, there is clear evidence both from the Irish and international literature that solid fuel burning, and the resultant particulate matter, is having harmful health effects on the Irish population.

Fuel Poverty in Ireland and a just Transition

The Department of Communications, Climate Change and Environment outlined in the Strategy to Combat Energy Poverty 2016-2019 that 15-28% of Irish households are in fuel poverty. The provision for households in fuel poverty must be the foundation of any regulation and phasing out of solid fuels.

Considerations

In drafting the submissions, Irish Doctors for the Environment strongly recommends the Department utilise the following approach.

1. An approach that supports a system wide change in fuel use in Ireland, that does not overly rely on individual change but focuses on societal change and commercial change.
2. An approach that is above all inclusive for all members of society.
3. An approach that priorities the long-term health of the nation over the financial and commercial gains in the short.
4. An approach that is sympathetic to the cultural themes in this consultation but not bound by them.
5. An approach that empowers local communities to transition from solid fuels.
6. An intergovernmental approach that maximises on the benefits to health, conservation, biodiversity, communities, tourism and retail by the phasing out of solid fuels.
7. An approach that acknowledges the opportunity to reduce the impact of fuel poverty in society.

Recommendations

This submission advises the following core recommendations;

1. An immediate nationwide ban on the burning of all smoky coal, wet wood and on the sale of sod turf.



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2. An informed, just and planned urgent nationwide ban on the sale, storage and burning of all solid fuels by 2025, this is to allow for homes experiencing fuel poverty to avail of upgrades.
3. An Expansion of the Free Energy Upgrades for Eligible Homes to all homes in fuel poverty.
4. An expansion of the SEAI's Warmth and Wellbeing pilot scheme beyond those with chronic respiratory disease to all chronic diseases' impacted by air quality.

We suggest the consideration of the following measures to aid the implementation of the above recommendations:

1. The development of a clear definition of fuel poverty and a review of fuel poverty in Ireland.
2. Collaboration with the Department of Health for the education of healthcare and social care providers on the health impacts of solid fuel burning with the promotion of grants for retrofitting within social care and healthcare settings, with a particular focus on the promotion of retrofitting for those with chronic diseases and as a component of chronic disease management plans.
3. The introduction of a third stream of funding; Community Group Applications for retrofitting, to encourage groups within communities to apply together for retrofit projects.
4. Graded tax incentives for landlords who upgrade the BER rating of their property.
5. Health warnings and graphics on the sale of solid fuel.
6. Phased implementation of on the spot fines for sod cutting.
7. A nationwide awareness programme on the health impacts of indoors and outdoors air pollution from the burning of solid fuels.
8. A targeted awareness and educational programme in communities where peat burning is most prevalent on the local benefits of conservation of our peatlands.
9. Grants for investment in communities with high rates of peat burning that provide a plan for the phasing out of peat burning and solid fuel, for, for example the development of a bog walk with further grants for successful phasing out.
10. Collaboration with the Department of Tourism, Culture and Arts for the further development of our Peatlands as unique tourist attractions.
11. A review process for retrofitting costs to ensure that, with greater demand, retrofitting costs do not increase, with the consideration of a maximum fixed price.

Conclusion

In conclusion, air pollution remains one of the biggest threats to human health, which causes a variety of adverse health effects including cardiovascular, respiratory and childrens' health, as described above. Irish Doctors for the Environment support the nationwide expansion of the smoky coal ban. We would recommend that this ban be expanded to all solid fuels to improve the health of the residents of the country, bearing in mind the opportunity to reduce fuel poverty in Ireland. Ireland has the opportunity to be a world leader in the fight against air pollution and the regulation of solid fuel burning is a key part of this.



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