

**Consultation on the Development of a new
Solid Fuel Regulation for Ireland
By the Department of the Environment, Climate and Communications**

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Response by Dublin City Council

Context

Purpose and Process of the Consultation

The Programme for Government commits to publishing the first ever Clean Air Strategy, including extending the ban on bituminous (“smoky”) coal to new towns and, over the term of Government, moving towards a full nationwide ban, so that the environmental and health benefits that have already been brought to cities and towns can reach every part of the country.

This consultation paper is being published in advance of the Clean Air Strategy to seek views in relation to the national application of the regulations currently applied to bituminous (‘smoky’) coal, as well as informing the development of appropriate regulatory controls for other residential solid fuels. This will inform the development of a comprehensive national regulatory approach to solid fuel burning for home heating.

This consultation signals that further and more comprehensive regulations are to be brought forward in this area in line with the Programme for Government.

Responses to this consultation should give consideration to all solid fuels, and proposed models for regulation and enforcement.

While the consultation is primarily a call for submissions that will specifically assist in the development of new regulations it will also be accompanied by wider and less formal public engagement through the DECC website, social media channels and online town hall events.

The Consultation set out 15 Questions, which will be addressed in this submission.

The public consultation will close at 5.30pm on Friday 2 April, 2021

Background

Progress to date

Smoky coal has been regulated in specific areas, known as Low Smoke Zones (LSZ), since such zones were first introduced in Dublin in the 1990s. This policy measure has been very effective in improving air quality and observed health impacts in these zones. The ban has proved very successful in reducing air pollution in Dublin, with research indicating it has resulted in up to 350 fewer annual premature mortalities in the capital. Following the success of the ban in Dublin, it was first extended to Cork (1995), and subsequently extended to cover a further 39 urban areas. These areas represent the major cities and towns/conurbations with populations in excess of 10,000.

Air Pollution Trends

The provision of additional data, from the enhanced National Ambient Air Quality Monitoring Programme (AAMP) and Environmental Protection Agency (EPA) funded research projects, indicates the extent to which other solid fuels, such as peat and wet wood, contribute to localised high levels of particulate matter and other pollutants during the heating season.

The 2020 EPA Air Quality Report highlights that the main source of the smaller and more dangerous particulate matter is solid fuel burning for home heating. The Report, indicates that values for all network sites were below the EU annual limit values for particulate with which Ireland is required to

comply, but exceeded the stricter WHO guideline values for a number of pollutants at individual sites.

Emerging Health Evidence – The Driver for Change

Poor air quality causes premature deaths, with the European Environment Agency estimating that it caused 1,300 premature deaths in Ireland in 2017.

The World Health Organisation has recognised air pollution in general, and particulate matter especially, as causing cancer to humans. The latest evidence indicates that the health impacts of air pollution are more wide ranging than was previously understood. This new evidence suggests that invisible forms of pollution, such as fine particulate matter (referenced as PM with a number to detail the size of the particle, such as PM_{2.5}), are at least as harmful to our health, as more visible forms of air pollution.

A growing body of research is demonstrating the links between air quality and even wider impacts on human health, such as on cognitive development (Zhang et al., 2018) and mental health (Braithwaite et al., 2019). Recent Irish research has shown the negative health impacts on the Irish public (Carthy et al., 2020; Quiltyne et al., 2020).

These negative health impacts come at a cost, both personally and economically. In addition to premature deaths, air pollution causes absence from work, reduced productivity, higher spending on medicines, and increased hospital admissions.

Research also indicates that the contribution of peat and wood to levels of particulate matter in the air can be considerable. It is, therefore, important to consider the potential health benefits to be achieved by extending regulations to other residential solid fuels.

Dublin City Council position on Consultation Document Questions

Overview

Dublin City Council welcomes this initiative to move over the term of this Government, towards a full nationwide ban on bituminous coal, and the development of appropriate regulatory controls for other residential solid fuels. Following through on introducing a national ban of bituminous coal, first announced in 2015, is all the more urgent given the body of credible health evidence that has emerged in the interim. Similarly the increased scientific evidence linking health affects to the burning of other solid fuels in domestic settings underlines the need for comprehensive action to be taken across the board.

In moving forward on this, the Department of the Environment, Climate and Communications are well aware that the solid fuel industry operates on an all-island basis and that any measures introduced in this jurisdiction must as far as possible avoid creating confusion amongst consumers or inadvertently giving rise to irregular market practices.

It must also be borne in mind that in the United Kingdom, the introduction of the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020, has provided a step change in the domestic use of coal and wet wood in that jurisdiction. These regulations effectively ban the use of bituminous coal and introduce wide ranging standards for the use and certification of wood fuel. While it remains to be seen if similar legislation will be adopted in Wales, Scotland or Northern Ireland, the Irish authorities must be vigilant to ensure that the introduction of measures, and the timing of such measures do not facilitate product dumping in either direction.

The regulations introduced in England also provide a useful guide for consideration in the development of regulations on domestic solid fuel use in Ireland.

It is noteworthy and perhaps a missed opportunity, that the consultation document is silent on the matter of domestic solid fuel appliances. It is well evidenced that solid fuel appliances and the manner in which they are operated, have a major impact on the subsequent emissions from any given fuel. In January 2022, EU Directive 2009/125/EC with regard to eco-design requirements for solid fuel local space heaters will come into effect, which will have a major influence throughout the EU on the specification and certification of new solid fuel burners coming into the market. As this will primarily come under the remit of consumer protection agencies in Member States, it will be crucial to ensure the resources required to enforce these requirements are in place.

With respect to the specific technical questions in the consultation:

1. In Are you in favour of a national regulation on solid fuels, and if so, why?

Yes - The introduction of the ban on the marketing, sale and distribution of bituminous coal in Dublin region in 1990 resulted in a significant, immediate and sustained improvement in air quality in the region. While episodes of poor air quality associated with particular meteorological conditions and the burning of domestic fuels can still occur, the severity, duration and frequency of such episodes are greatly reduced compared to previously.

What has also changed is the universal acceptance that complying with legal limit values alone does not go far enough in terms of protecting human health. For that reason, in February 2020, the four local authorities in Dublin signed up to the UN Breathe Life Campaign, which commits them to meeting WHO air quality guideline values by 2030. The current move at EU level to work towards moving EU standards in line with WHO guideline values underlines this shift in thinking, In order for all communities in Ireland to enjoy clean air, a national approach to regulating and where appropriate eliminating the most polluting solid fuels is the only viable and sustainable approach.

2. What solid fuels should be subject to regulation and why?

Currently the marketing, sale, distribution and burning of bituminous and low smoke coal are regulated. The clear evidence is that other widely used solid fuels such as wood and peat are also affecting air quality and are known to have a wide range of deleterious health effects. There is therefore a clear case for all such fuels to be subject to regulation.

Beyond these “traditional” solid fuels, there is also a growing interest in the use of solid biomass fuels. The Sustainable Energy Authority of Ireland have identified the potential of biomass fuels in general in addressing some of the sustainable challenges facing Ireland in the coming decades, while recognising the potential air quality issues, particularly with regard to particulates. These biomass fuels are also the subject of current regulation and the standards currently set for such fuels should not be altered (see Point 12)

3. What standards or specifications should/could be applied to each type of solid fuel?

The current standards for low smoke coal and solid biomass fuel as provided for in current legislation should continue.

Currently there are no legal specifications in place for wood fuel in Ireland, and given the variation in wood species etc. the most widely used standard applied internationally is to set a maximum moisture content level. This is commonly set at 20% maximum moisture content.

4. What do you believe are the most appropriate, implementable and enforceable regulatory approaches for each type of solid fuel?

The main regulatory approach that have been demonstrated to work effectively in solid fuel regulation is on the ground enforcement at local authority level. This should continue to be the primary approach. The Programme for Government commits to underpinning air pollution enforcement with regional arrangements if required and this could be particularly effective in the enforcement of solid fuel regulation where fuel suppliers operate across local authority boundaries or engage in online sales.

One issue that needs attention is in relation to sampling, analysis and certification of solid fuels. There is no certified laboratory on the island of Ireland that can carry out the necessary analysis and all such fuel samples have to be sent to the UK. This is not insurmountable but the development of a national solid fuel sampling regime, carried out by one national body would streamline the entire process and would ensure there was not duplication of effort or resources and equally that non-conforming product finding its way onto the market regionally or nationally could be dealt with expeditiously.

5. How can a transition to less polluting fuels and more efficient heating systems be supported? (Building upon the measures already set out in the Climate Action Plan)

Research by UCC has highlight problems related to fuel poverty in Ireland as defined as “excess winter deaths arising from inadequate heating”. This research underlines the need to combine the banning of smoky fuels with the need to change the way homes are heated through extensive retrofitting of houses. It is estimated in 2015 that 2,800 deaths occurred annually on an all-island basis due to cold weather and inadequate heating. This statistic sits alongside the estimated 1,300 annual air pollution related deaths in the Republic of Ireland. It is therefore clear that concerted efforts on addressing fuel poverty in parallel with banning smoky fuels, could have multiple health benefits.

The transition must also be predicated on the inextricable link, as recognised in the Dublin City Climate Action Plan between reducing air pollutants, (including greenhouse gases) and lessening or eliminating the use of carbon-based fuels and moving to renewable sources of energy and carbon absorption by vegetation.

6. What do you think is an appropriate timeframe for the implementation of a national regulation of solid fuel?

7. What timeframe should be applied to the inclusion of new solid fuels into legislation to allow for the necessary transition, including the phase out of existing stocks?

8. Should suppliers and retailers be given a transition period to use up existing stocks of solid fuels not meeting emission standards and, if so, how long?

Questions 6- 8 are intrinsically linked and essentially address the same matters.

In 2015 when a national ban on the sale of bituminous coal in Ireland was first mooted, a “wash through” period of up to 3 years was considered as appropriate period for the solid fuel industry to make the necessary arrangements.

In the UK, the Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020, a staggered time frame of three years for the implementation of all the requirements of the Regulations have been provided for, with the bulk of these occurring in the first year i.e. by May 2021.

A similar approach would be appropriate in the context of new regulation in Ireland with the ban on the sale of bituminous coal taking precedence.

With regard to peat, Bord na Mona will not be marketing peat briquettes after 2024 and this should be taken into consideration in the overall time frames.

9. Are there particular challenges in terms of the enforcement of regulations applying to solid fuel burning, and how might these be best addressed?

The setting up of the Local Authority Implementation Group (LAIG) on Solid Fuels (consisting of representatives from DECC, EPA and local authorities) has been an important factor in identifying and addressing ongoing enforcement challenges. Resources for environmental enforcement in local authorities are an ongoing concern, and maximising the best use of available resources is a constant challenge.

One reoccurring issue of concern for all local authorities is ensuring that product marketed as a low smoke fuel meets the standards set by regulation. As referenced in point 4 above, the absence of a national programme for sampling and analysis for solid fuels must be addressed.

10. Do you have any further proposals to reduce air pollution from residential heating?

It is critical that all measures in respect of reducing air pollution from residential heating are mainstreamed in City and County Development Plans and in Climate Change Action Plans. In that respect, Dublin City Council has ongoing commitments regarding the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.

11. What performance standards, certification methods or quality schemes should/could be used to reduce air pollution caused by burning solid fuels?

A state agency should be nominated as an approved solid fuel certification body. Currently elements of this role are divided between the NSAI and the EPA in respect of solid fuel marketed in Ireland. Bringing these responsibilities under the one agency is a necessary first step in developing appropriate performance standards, certification methods or quality schemes.

Thereafter, EU Directive 2009/125/EC will apply in terms of appropriate standards for solid fuel burners.

A review of performance standards, certification methods and quality schemes for solid fuels utilised in other jurisdictions should also be carried out.

12. Would broadening the application of the 10 gram smoke per hour to all solid fuels be appropriate?

The broadening of the application of the 10 gram smoke per hour to all solid fuels would **not** be appropriate. Currently under the Air Pollution Act (Marketing, Sale, Distribution and Burning of Specified Fuels) Regulations 2012, bituminous coal products, are subject to a maximum smoke emission rate of not more than 10 grams per hour.

However under the Air Pollution Act (Marketing, Sale, Distribution and Burning of Specified Fuels) (Amendment) Regulations 2016, biomass solid fuel products are subject to a maximum smoke emission rate of 5 grams per hour.

It appears unwarranted to relax the standards in respect of biomass fuels (effectively doubling the volume of smoke emitted by them) when these products are currently available on the market and are capable of being produced to the stricter standard.

13. Are there any additional or different emission standards which could be applied to the broader range of fuels?

In addition to a smoke emission rate standard, the other standard commonly used for low smoke fuels is sulphur content. The key element in this is to keep such standards unambiguous and consistent. The current standard of a maximum value of 2% sulphur should be retained for low smoke coal.

14. Is it appropriate to use moisture content as a standard for the application of regulations to wood and, if so, at what limit should the moisture content be set?

In the absence to date of legislation in Ireland regarding the moisture content of fuel wood, Dublin City Council has for a number of years advised householders that if they chose to burn wood, they should try to source wood fuels with a moisture content below 20%. This is a general standard used in many other countries, and it reflects that the wood has been suitably aged and dried.

The Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020, which are referred to elsewhere in this submission, specify a 20% moisture for wood fuel and it would be prudent to emulate that standard in any similar legislation here.

15. What limit should be set as a cut-off point for the sale of wet wood?

- Bags/nets only;
- Up to 2m³;
- All wet wood; or
- other- please provide reasons or evidence to support your answer

Over time (to a suggested maximum introductory time of 12 months) the restrictions should apply to the sale of all wet wood. The experience gained over the 31 years since the introduction of the ban on bituminous coal demonstrates that providing exceptions to regulations on sales of fuel on the basis of weight or volume can be open to misinterpretation and deliberate non-compliance. By way of example, there was prolonged deliberation in developing regulations on bituminous coal as to what constituted a “bag”.

Conclusion

In conclusion Dublin City Council urges the Minister to move with all urgency on this matter. A similar public consultation carried out in 2012, resulted in the announcement in 2015 of the intention to introduce a national ban on the sale of bituminous coal. The findings from the scientific and health research in the interim only serve to underline the undeniable need for urgent action. Achieving the targets set for climate action, protecting the environment and improving the health of the public are predicted on actions, and acting on domestic solid fuel usage has a wide spectrum of other co-benefits.