



Rialtas na hÉireann
Government of Ireland

Public Consultation on the development of new Solid Fuel Regulations for Ireland

response from

BORD^{NA}MÓNA
Naturally Driven

April 2021

Introduction

Bord na Móna (BnM) welcomes the opportunity to respond to the Department of the Environment, Climate and Communications (DECC) *'Public Consultation, on the development of new Solid Fuel Regulations for Ireland'*, the 'consultation'.

BnM is opting to respond to the consultation *via* this detailed submission, rather than employing the online questionnaire contained on the DECC's website.

Please note that in the course of this submission, distinctions are made between fossil and renewable solid fuels, as well as solids fuels that are commercially traded and placed on the market, versus those that householders, in effect, self-supply.

Bord na Móna is in the implementation phase of its 'Brown to Green' strategic transition. The company is managing a phased exit from its historical 'fossil' based activities and is pivoting to focus on becoming a Climate Solutions company. In January 2021, the company confirmed that it had permanently ceased peat harvesting and was to focus on renewable energy, recycling, peatland restoration and the provision of other low carbon goods and services. However, it must be stressed that this decarbonisation journey did not begin this year - Bord na Móna developed the country's first commercial wind farm nearly 30 years ago in County Mayo, the organisation tentatively started co-firing sustainable biomass with peat in 2007 and today over 50% of the electricity generated at Edenderry is renewable. Also, in 2014 BnM divested its oil distribution business and in 2018 announced our exit from coal.

Bord na Móna, as a company and a member of the Solid Fuel Trade Group (SFTG), has played a key role since the late 1990s in bringing an orderly transition towards cleaner, smokeless and low sulphur solid fuels to the industry, whilst endeavouring to instil compliance across all players, whether members or not. As part of this group, Bord na Móna was instrumental in bringing about the initial stage Voluntary Agreements which were subsequently enacted into law.

Bord na Móna will continue the manufacture and sale of its iconic briquettes until 2024 using peat that has previously been harvested. Before this date, Bord na Móna intends to develop a smokeless renewable solid fuel to meet market needs.

Given our experience in the solid fuel marketplace, Bord na Móna is uniquely qualified to understand that a sudden supply shock would have severe consequences for a large cohort of householders who rely on solid fuel for heating, hence an outright ban of solid fuel within the home is simply not feasible.

However, factors other than the practicality of an immediate outright ban also need to be considered in this Air Quality policy initiative. In May 2019, Ireland was the second country in the world to declare a climate emergency; only this week (March 23rd) the Government launched a consultative 'conversation' on the updated Climate Action Plan 2021, following on from the revision to the draft Climate Action Bill published on the same day. Decarbonisation and the commitment to achieving a climate neutral economy no later than 2050 will be legally binding on the Government. Sectoral emission ceilings will be introduced in the forthcoming carbon budgets. Therefore, in the heating sector, which along with transport has proved the most difficult to decarbonise to date, policy changes and legislative initiatives in these sectors including those relating to air quality must be viewed through the lens of decarbonisation. In this respect, and accepting the reality that solid fuel has a role in the Irish heating sector for the foreseeable future, and also that all solid fuels impact air quality to some extent, there is a clear rationale to differentiate between renewable and fossil solid fuels. In the

course of this submission, Bord na Móna will outline proposed recommendations for differences in legislative control measures for renewable and fossil, solid fuels.

In a similar vein, Bord na Móna believes the distinction between solid fuels (both renewable and fossil) that are commercially marketed and traded versus solid fuels that householders effectively self-supply themselves should also be differentiated. Again, in the course of this submission, Bord na Móna will outline proposed recommendations for differences in legislative control measures for commercially traded and self-supplied solid fuels.

Noting the above, Bord na Móna's response to this consultation can be summarised in the following bullet points.

- Bord na Móna supports the orderly phasing out of smoky fossil fuel – including bituminous coal and any fossil fuel not meeting new legislative standards
- The introduction of maximum sulphur and emission limits for all traded solid fossil fuels should be enacted and actively enforced
- Renewable solid fuels that are commercially traded should also be subject to legislative control measures based on moisture and sulphur content
- Until such time as retrofitting measures have been fully implemented - solid fuels that are not marketed or traded commercially, but which are self-supplied by householders, should be exempted from legislative control measures
- Bord na Móna supports the Government's ambition in relation to retrofitting the country's housing stock and sees merit in initially focusing on the Just Transition region in the Midlands.
- Improvements in air quality will not be delivered without a commensurate improvement in enforcement targeting 'grey market' smoky fossil fuels; and in addition, enforcement of future legislative controls, for renewable solid fuels that are commercially marketed and traded, will also be required.

Discussion

Bord na Móna supports the Government's commitment to extend the ban on bituminous ("smoky") coal to new towns and, over the term of this Government, moving towards a full nationwide ban, so that the environmental and health benefits that have already been brought to our cities and towns can reach every part of our country. This position is underpinned by the scientific literature regarding the potential health impacts of particular matter (PM) as detailed in the consultation and outlined at virtual 'Town Hall' meetings, and attributes equal importance to the need to decarbonise the heating sector. However, it is accepted, as per the objective in the Program for Government (PFG), that an immediate ban on all solid fossil fuels is not feasible. Instead, there must be both a phased approach to the 'banning' of smoky solid fossil fuels, in parallel with clear unambiguous criteria for the certification and legislative control of low smoke (and low sulphur) fuels that can be legitimately placed on the marketplace. In addition, different legislative controls (and subsequent robust enforcement) are recommended for renewable solid fuels, as well as exemptions for non-traded or commercially marketed solid fuels which householders effectively self-supply.

Solid Fossil Fuels – Phase out and Smoke Emission Limits

A period of 3 years following the enactment of any new legislation is recommended to phase out all fossil fuels that fail to meet the applicable legislative controls (see below). This grace period should allow sufficient time for suppliers and retailers to wind down existing stocks of smoky fossil fuels while also allowing sufficient time for those organisations (and government) to respond with adequate measures and ensure a *Just Transition* for those workers, communities and companies that may be detrimentally impacted by these legislative changes.

As suggested above, in parallel with this ‘phasing out’ of stocks, regulations prescribing legally binding emissions and quality standards should be introduced for all solid fuels (fossil and renewables) that are commercially marketed. In keeping with good regulatory practice, the prescribed emissions and quality standards must be based upon established, unambiguous, objective and transparent testing regimes.

Focusing first on smoke emissions, there is an existing emission testing method that measures this parameter, namely BS3841-1:1994 (*General method for determination of smoke emission rate.*) This existing legislation SI 326/2012 references this standard as the basis for determining smoke emission rates, albeit with its application focused on ‘*manufactured fuel*’. Bord na Móna believes there is merit in broadening the use of the smoke emission rate analysis within the BS3841 methodology, such that all solid fossil fuels that are commercially traded and placed on the market are subject to this test. This test, along with other legal standards (which should also be retained), is already ‘on the statute books’, and a smoke emission rate of 10g/hr is prescribed to define compliant manufactured fossil containing fuels for use in existing smokeless or specified areas.

It is therefore logical, consistent, and proportional to extend the existing legislative regime and prescribe a single smoke emission rate (10g/hr) criteria for all solid fossil fuels.

Solid Fossil Fuels – Sulphur content

In addition, it is recommended that all solid fossil fuels which are commercially traded and placed on the market, continue to be bound by a sulphur content below a specific value. Again, existing legislation provides both testing methods and specific limits. Bord na Móna recommends that legislative controls on sulphur content continue to be actively applied and enforced for *all solid fossil* fuels that are commercially traded and placed on the residential heating market. Current legislation cites a testing methodologies for sulphur content, ISO 1171 (dry ash content), which limits sulphur 2% by weight on a dry ash-free basis. Bord na Móna recommends that, in the interests of improving air quality, there is active enforcement by the Local Authorities of this sulphur limit.

It is recommended, that all solid fossil fuels, including renewable and manufactured fuels containing bituminous coal, that are commercially traded and placed on the market shall continue to be legally required to have a sulphur content of no greater than 2% by weight on a dry ash-free basis; a requirement that should be robustly enforced.

Solid Renewable Fuels – Legislative Controls

In the first instance, it is necessary to note that solid fuel is not the only source of ambient air pollution, and that to date, there is an absence of accepted scientific methodologies to *definitively* assign source apportionment¹ between all fuels. In light of the forthcoming carbon budgets, policy initiatives and legislative decisions are now required to examine their potential impact, not just in terms of the primary purpose of the instrument, i.e. air quality, but also the impact and potential unintended consequences on climate change and decarbonisation objectives. It is also accepted that a large cohort of Irish households will continue to be reliant on solid fuels for the foreseeable future (see below for BnM's support to increase resources for retrofitting).

This creates something of a dilemma for policy makers, notwithstanding differences in carbon taxes, solid fossil fuels are in general less costly than equivalent renewable alternatives. Both, to greater or lesser extents impact air quality, however their underlying chemical make-up and combustion characteristics differ. In recognition of these differences and respecting the overarching climate concerns, Bord na Móna recommends a different approach, relative to fossil fuels, for all solid renewable fuels that are commercially traded and placed on the market. Bord na Móna supports legislative controls for all traded solid renewable fuels, e.g. dry wood and biomass products, that is based on the moisture content of the fuel. This approach is underpinned by scientific evidence that can be summarised as the higher the moisture content, the greater the propensity for particulates negatively impacting air quality.

Bord na Móna recommends that future legislation requires all solid renewable fuels (including dry wood and manufactured biomass products) that are commercially traded and placed on the market to have a moisture content of no greater than 30%, with a downward trajectory for this limit over time.

For the avoidance of doubt, adapting this moisture limit would prohibit wet and unseasoned wood from being sold to the public from any commercial outlet.

Although not an issue in general for wood based fuels, there is merit in also prescribing a limit on the sulphur content for renewable solid fuels that are commercially traded and placed on the market, it is recommended that the 2% by weight on a dry ash-free basis is retained.

<p>Bord na Móna recommends that future legislation requires all solid renewable fuels (including wood and manufactured biomass products) that are commercially traded and placed on the market to have a prescribed maximum moisture and sulphur content, which are actively enforced.</p>
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Non-traded Solid Fossil & Renewable Fuels

It must be recognised that a significant number of Irish householders have a degree of self-sufficiency in terms of residential heating. This self-sufficiency arises as some or all of the solid fuel consumed in

¹ Notwithstanding the 'review' of the literature on ambient air quality measured across Ireland and presented as part of the virtual 'Town Hall' meetings, it is important to note that the EPA in their *Source Apportionment of Particulate Matter in Urban and Rural Residential Areas of Ireland (SAPPHIRE)* paper (which effectively collates recent Irish research), concludes that reported source apportionment against actual fuel usage cannot be strongly correlated. In addition, the recent Town Hall presentations focused on transient peaks rather than ambient background levels associated with transport, agriculture, and other non-anthropogenic sources, somewhat overlooking the health impacts associated with persistent background level of pollutants.

these households is not procured *via* outlets where solid fuels are commercially traded and placed on the open market. In particular, turf (from turbary rights or traditional supply arrangements) and wood (largely unseasoned and locally sourced) continue to be important feedstocks in keeping Irish householders warm and comfortable in their dwellings. The burning of these solid fuels impacts on air quality and in the case of turf, contributes to GHG emissions. Absent viable short-term alternatives, pragmatic treatment of these fuels, in any putative legislation, are required.

Until such time as retrofitting measures have been implemented in full, Bord na Móna recommends that solid fossil & renewable fuels used in residential heating that are not commercially traded nor placed on the market (effectively self-supplied) are exempt from emission rate standards and compositional analysis.

In summary, Table 1, below details Bord na Móna's recommendations contained in this submission

Solid Fuel	Classification	Control Measure	Limit Value
Fossil Fuel	Marketed or Traded	Smoke Emission Limit Sulphur content limit	10 g/hr smoke emission rate based on BS3841 ² Continue 2% by weight on a dry ash-free basis (ISO 1171) with active enforcement
Fossil Fuel	Non-Marketed or Non-Traded	Exempt but limited to self-supplied turf for residential use	na
Renewable Fuel	Marketed or Traded	Moisture Limit Sulphur content limit	Initially an upper limit of 30% (ISO 1018) with a downward trajectory for over time Continue 2% by weight on a dry ash-free basis (ISO 1171) with active enforcement
Renewable Fuel	Non-Marketed or Non-Traded	Exempt but limited to self-supplied wood for residential use	na

Table 1 Summary of proposed Legislative Control for Solid Fuels

² It is accepted that the measurement of smoke emissions from anthracite may need an alternative methodology

Enforcement

The success of any future controls will depend on the robust enforcement of the legislative standards and restrictions. In addition to the air quality and climate objectives at play, there is also the lost Carbon Tax revenue (and VAT) to the exchequer from the 'grey market' sales of illicit solid fuels. Going forward, if the responsibility for enforcement of existing and future legislative controls for solid fuels is left with Local Authorities (LAs), then there is an onus on government to ensure that LAs are properly informed of their obligations, adequately resourced to carry out the role and that there is independent oversight of their performance.

Bord na Móna notes the comments of the SFTG in respect of 'Enforcement of Product Standards' in their submission to this consultation and supports their findings, conclusions and recommendations in this specific area.

Robust enforcement of existing and future legislation is critical – Local Authorities must be resourced to police statutory provisions. Independent oversight of enforcement performance is also necessary, and this information should be disseminated to industry participants and the public on a regular basis.

Support for the government's Retrofitting programme

Bord na Móna, more so than any other organisation in the State, understands and appreciates the challenge of decarbonising. The ongoing paradigm shift in the energy sector impacts people, communities and how basic human needs are met. As discussed above, it is not feasible to introduce an outright ban on solid fuels for the basic need of heating a home. Bord na Móna has previously welcomed the announcement in the PfG of the large-scale rollout of residential retrofits in the period to 2030. As improvements in household energy efficiency measures and low carbon heating systems are delivered, dependencies on solid fuels as the primary mode of warming homes will decrease.

Bord na Móna acknowledges the proactive steps taken by government in mitigating the impacts from this organisation's exit from peat harvesting and the focus on ensuring a Just Transition for workers and communities in the Midlands.

Bord na Móna supports the announcement in December 2020 of a *Midlands Retrofit Programme for Local Authority Homes* and believes there is merit in expanding the scheme to include private households in the Midlands.

Summary

In conclusion, Bord na Móna welcomes this initiative by government. The company supports the nationwide phasing out of smoky solid fuels, the introduction of legislative controls to define solid fuels that can be commercially traded and placed on the market, and exemptions for householders that effectively self-supply solid fuels. Bord na Móna calls for proactive enforcement of existing and

future legislative controls on the commercial sale and marketing of solid fuels. The company recognises that those tasked with this role (Local Authorities) must be both adequately resourced while also being subject to independent oversight.

Bord na Móna welcomes the government's retrofitting programme in the Midlands and believe there is merit in extending the focus to all householders in the region.

We look forward to future engagement on the important issues raised in this consultation, and if, in the interim, you require additional information or clarity in regard to any of the issues raised in this response, please do not hesitate to contact me.

For and on behalf of Bord na Móna,



[Redacted signature and name]
Bord na Móna