

Response to WG consultations on reducing emissions from domestic burning of solid fuels.

Submission by Natural Resources Wales

Role of Natural Resources Wales

- Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future.
- Natural Resources Wales is responsible for regulating industrial (including waste treatment) sites minimising their impact on the surrounding environment including their contribution to air pollution.
- Natural Resources Wales is principal adviser to Welsh Government, adviser to industry and the wider public and voluntary sector, and communicator about issues relating to the environment and its natural resources.
- Natural Resources Wales is committed to supporting local authorities in achieving their responsibilities relating to the attainment of the EU and UK Air Quality Standards / Objectives. We do so by regulating industrial sites in line with the Environmental Permitting Regulations 2016, ensuring that their contribution to air pollution is minimised and does not lead to a breach of these objectives.
- We are also responsible for the production to the State of Natural Resources report every 5 years. This report informs the development of the national Natural Resources Policy as well as individual Area Statements.
- We lead on the development of the Area Statements working with public bodies and other stakeholders across Wales.
- We welcome the development of the Clean Air Plan and this consultation in relation to progressing some of the aspects within the Plan. We look forward to continuing to work with Welsh Government (WG) to support the delivery of the plan. Our State of Natural Resources report (SoNaRR) and Area Statements will be used to evidence and encourage action to deliver on air quality improvements across Wales.

Proposed actions to tackle emissions from domestic burning of solid fuels.

Phasing out the use of Bituminous /traditional household coal for domestic burning.

1. Do you agree that we should phase out the sale of bituminous/traditional house coal for domestic consumption?

We agree that the sale of bituminous / traditional house coal for domestic consumption should be phased out. Bituminous coal / traditional house coal is recognised as being the most polluting solid fuel used in domestic combustion and as such is a significant contributor to poor air quality, both indoor and outdoor, where used. The use of bituminous / traditional coal as the main heat source for domestic purposes has declined significantly over the years, therefore, the change is unlikely to impact on many households. Where needed many other less polluting solid fuels are now available on the market.

2. What do you consider is a reasonable transition period to allow industry and householders to use up existing stock?

a. 1 year? b. 2 years? c. No transition period?

As a result of the significant localised impact from domestic burning of bituminous coal we recommend that the transition period is kept to an absolute minimum. We do, however, recognise that a short transition time will be required to allow the industry and individual households to use up existing stock but the transition time should be kept as short as possible and should not exceed 1 year.

We, also, advise that a communications campaign, to assist householders in the transition to another fuel or source of heating, is carried out ahead of legislative change. Such a campaign would enable the transition time to be kept to an absolute minimum.

3. In the event of a ban we would need to ensure that bituminous/traditional house coal products are prevented from being marketed as “smokeless” or “low smoke” fuels?

a. Would you consider the Irish model of registration of suppliers appropriate? (please provide your reasoning)

We recognise that a registration system for coal bagging operators and fuel suppliers could be a useful tool to provide a system to identify legitimate suppliers. Alternatively, it may be more effective to target wholesale companies and distributors and focus on removing the supply chain for polluting fuels.

We believe that for a registration system to be effective it needs to be adequately resourced and backed with an enforcement strategy.

b. Would you prefer to see an industry-led approach? (similar to “Ready to Burn” scheme referred to in the wood section below)

We believe that an industry-led approach would be less effective than a registration system as an industry-led scheme may cause unnecessary delays in reform due to procrastination as a result of vested interest in limiting change.

We advise that if Welsh Government (WG) wish to pursue an industry-led approach that the scheme would need to be managed by WG or assigned body to ensure sufficient focus to deliver the required outcomes in a timely manner.

4. In order to comply with any proposal to phase out bituminous/traditional house coal what adjustment, if any, would your business need to make?

Not applicable to our organisation.

5. What support might you require to make these adjustments?

Not applicable to our organisation.

6. Do you agree that we are taking appropriate steps in view of the need to reduce our carbon emissions?

We agree that these are appropriate steps to reduce our carbon emissions. The phasing out of the use of bituminous / traditional household coal from the domestic environment will reduce our carbon emissions both directly and indirectly along the supply chain from extraction to distribution of this fuel.

7. If you have any further comments or suggestions on this section, please provide them here.

No further comment.

Prohibit the sale of wet wood for domestic burning

8. We are considering a minimum volume for the sale of wet wood to householders. We are proposing that this is set at 2m³, but we wish to seek views on this point. Please indicate what limit you think this should be set at.

- a. There should be no limit
- b. No volume below 0.5m³
- c. No volume below 1m³
- d. No volume below 2m³
- e. No sales of wet wood

Note: A normal net bag of wood purchased from a DIY store, garage or other outlet is usually less than 0.1m³.

We advise that the most practical solution is to limit the sale of wet wood to below 2m³. Our reasons are as follows:

- Households that burn wood extensively mostly buy in bulk and season (dry) the wood at their property prior to burning as this increases the efficiency of the wood fuel and reduces build up of tars within the flue system of their stoves.
- Tipper trucks that deliver to such households typically have a loose load capacity of about 2m³
- Households that do not have the storage capacity to season large volumes of wood will buy in small volumes in the form of bags of pre-dried wood from a garage or a DIY store.

We also recommend that

- (i) clarification is given on whether the maximum volume refers to loose or stacked volume of wood.
- (ii) it may be useful to understand the approaches to the use of stoves in an urban environment in other cities such as Copenhagen to understand whether similar approaches may be appropriate in Wales.

9. Do you think that suppliers and retailers should be given a transition period to sell existing stocks of wet wood?

Note: Suppliers and retailers would be permitted to store supplies of wet wood for drying however they would not be allowed to sell this to domestic consumers if it has a moisture content above 20%.

We agree that a transition period to sell existing stocks of wet wood is appropriate to allow suppliers and retailers to sell existing stocks of wet wood. A transition period would, also, give suppliers the opportunity to install storage / drying sheds and appropriate packaging facilities where needed.

Consideration should be given whether to require waterproof packaging for smaller volumes to ensure that moisture is not re-introduced at retail premises as a result of inappropriate storage. e.g. wood fuel bags stored outside garage shops.

10. If so, how long should any transition period be?

- a. 1 year
- b. 2 years
- c. No transition period

As a result of the [significant impact of domestic burning of wet wood on both indoor and outdoor air quality](#), we recommend that the transition period is kept to an *absolute minimum*. We do, however, recognise that a short transition time will be required to allow the industry and individual households to use up existing stock but the transition time should be kept as

short as possible and should not exceed 1 year. This will allow enough time for suppliers across Wales to adapt to the legislative change.

Again, we advise that a communications campaign, to assist householders moving away from wet wood, is carried out ahead of legislative change. Such a campaign would enable the transition time to be kept to an absolute minimum.

11. Do you agree that wood fuel suppliers should be required to be members of a certification scheme that provides assurance (via testing and auditing) that the wood is of a moisture content of 20% or less?

a. Yes

b. No

We agree that wood fuel suppliers should be required to be members of a certification scheme that provides assurance (via testing and auditing) that the wood is of a moisture content of 20% or less. A certification scheme will set standards and allow control of the moisture content of wood sold as fuel which in turn reduces emissions.

The certification scheme should be backed by an enforcement strategy to maximise the effectiveness of the scheme.

Consideration needs to be given to how informal wood fuel sales via farmers and land management employees can be brought into the certification scheme.

12. Do you agree that retailers selling wood should be legally required to store the wood in such a way that it will maintain at least the stated moisture content?

a. Yes

b. No

We do not support of introducing a legal requirement on the storage of wood fuel at retailer premises.

We suggest that the wood fuel supplier would have an interest in ensuring that the moisture content of the wood does not increase prior to sale to the domestic consumer and will therefore package the wood fuel appropriately to facilitate storage at the retailer premises.

13. Alternatively, would you welcome a campaign to provide guidance to both retailers and households on how best to store both wet and dry wood, and how long to store to ensure it is seasoned properly?

a. Yes

b. No

We would welcome a campaign to provide advice and guidance to retailers and households on the storage of both wet and dry wood.

We suggest that, as a first step, information already available could be channelled more effectively to all wood fuel users. Further information can be developed where there are gaps in the existing information.

14. Do you feel Welsh Government should treat kiln dried wood differently to naturally dried wood or treat both types equally?

We recommend that all wood fuel is subject to the same legal requirements regardless of drying method. This will maximise the reduction in emissions that can be achieved.

With time there may be market factors that encourage suppliers to adopt specific drying techniques due to potential increase in energy costs associated with kiln drying or land availability for natural drying techniques.

15. Should the sale of wet wood to domestic properties be treated differently in rural as opposed to urban settings?

We believe that there should be a consistent approach across Wales to the sale of wet wood regardless of location. This will give greater clarity and avoid confusion on which standards apply especially in semi-rural locations.

The majority of urban properties are unlikely to have sufficient storage to accommodate the larger volumes of wet wood sales and will therefore be limited to consuming small volumes of bagged pre-dried wood fuel.

16. If you are a supplier/retailer, how would these proposals affect your business?

Not applicable to our organisation.

17. What support might you require to make these adjustments?

Not applicable to our organisation.

18. If you have any further comments or suggestions on this section, please provide them here.

A significant amount of people use wood fuel across Wales and an outright ban would have a large impact on many people. It is also very difficult to regulate. Taking clear, simple steps to improve the quality of fuels burned is the first logical step in reducing pollution. This will also allow the impact on air quality to be monitored to assess whether the improvements are realised.

We suggest that behavioural change initiatives could be useful in moving people away from the reliance on domestic burning of solid fuel as a heat source. Such initiatives should include awareness campaigns of the impact of domestic wood burning on air quality inside and outside the home and its impact on health. Existing evidence on air quality impacts and health information from Public Health Wales would be useful sources of information for such initiatives.

It may also be appropriate to consider financial incentives to encourage householders to move away from domestic burning of solid fuel.

Applying standards to manufactured mineral solid fuels

19. Do you agree that we should introduce a standard for all manufactured mineral solid fuels which confirms they are below 2% sulphur and meet a smoke emissions limit of 5g/hr?

a. Yes

b. No

We agree that a standard for all manufactured mineral solid fuels should be introduced as this would improve air quality by reducing both sulphur dioxide and particulate (dust) emissions. These standards should be applicable for all sales of manufactured mineral solid fuels for domestic burning across Wales and not be limited to combustion within a Smoke Control Area.

20. In order to comply with any proposal to apply sulphur and smoke emissions standards to all manufactured mineral solid fuels, what adjustment, if any, would your business need to make?

Not applicable to our organisation.

Manufactured biomass solid fuel

21. Do you agree we should endorse the Sustainable Fuel Register (SFR) and actively encourage applications from manufacturers in Wales?

We believe that WG should explore the use of SFR in Wales and actively encourage applications from Welsh manufacturers if appropriate to do so. We note that currently the SFR only assesses the fuels in relation to reducing greenhouse gas emissions. Any scheme in Wales should also consider the impact on other pollutants (see response below).

22. Do you agree any registration scheme for manufactured biomass solid fuels should be expanded to include testing and certification for PM and other emissions?

We support that any registration scheme should be expanded to include testing and certification for particulates (dust) as well as other emissions such as nitrogen oxides and sulphur dioxide.

23. If you have any further comments or suggestions on the sections on manufactured fuels, please provide them here.

Currently, a significant amount of manufactured biomass fuels such as compressed heat logs are being imported from other countries such as Latvia and Estonia. Importing fuel generates additional pollution as a result of the long transport routes. There may be an opportunity to develop the manufacture of such logs as a new industry in Wales.

Compressed heat logs typically have a very low moisture content of between 6% and 8% and as a result burn with minimal particulate emissions.

Consideration needs to be given to control of other aspects of wood used as fuel other than percentage humidity. Waste wood, for example old window frames, are used in many households as a source of fuel. Burning of waste wood produces a greater volume and range of harmful pollutants.

Consideration should be given to assessing parameters other than moisture content as part of the development of a registration scheme for suppliers and distributors.

Appliances (p21)

24. Do you agree an appropriately qualified technician (installers, service engineers and sweeps) should be certified to enable them to give environmental guidance and condemn dangerous appliances?

We support the approach that appropriately qualified technicians should be certified to give environmental guidance and condemn dangerous appliances. This approach is already in use for some other heating appliances e.g. gas appliances. We recommend that standards should be agreed so that the judgement in relation to dangerous appliances is applied consistently.

25. Some regions of France require chimneys to be swept annually by a registered and qualified sweep. Otherwise, in the event of a fire caused by the stove, the home insurance will not be valid. Do you agree this approach should be adopted in Wales?

We advise that guidance is produced for stove owners in relation to chimney sweeping rather than at this stage requiring an annual chimney sweep by a registered and qualified sweep. It may be appropriate to gather data on incidents of fire that have been caused by domestic stoves in the UK to inform considerations on whether Wales should adopt a system similar to that in France in future.

26. Would you consider some form of scrappage scheme to be an appropriate method to encourage the replacement of inefficient appliances currently in use?

We believe that the most significant contribution to improvements in air quality will be realised through control of the fuels used in domestic combustion. We recommend that any scrappage scheme should at least initially focus on supporting the replacement of stoves that are condemned if a scheme such as that referred to in question 24 above should be introduced.

27. Should any scrappage scheme be limited to households where the burning of solid fuels is the primary heat source or should this be expanded to encourage people to use non-carbon heating?

We recommend that any scrappage scheme that may be introduced is focussed on making the largest contribution possible to air quality improvements within the limitations of the funding available. Therefore, it would be appropriate for the scheme to be open to all so that

as many households as possible are encouraged to move to a low carbon system to heat their homes. See also response to question 26 above.

28. It is presently outside the scope of the Welsh Government to set taxation rates. Do you support a proposal to explore a lower VAT rate on domestic fire and stove maintenance to encourage householders to maintain their appliances regularly?

The lowering of VAT rate on domestic fire and stove maintenance may encourage good maintenance by enabling costs to be minimised. However, we would suggest that the main driver for improvement in air quality should be via education and behavioural change initiatives to move householders towards other ways of heating their homes.

Support for households to change to alternative heating sources

29. Do you have a preference for any of the options outlined above?

- a. Option 1
- b. Option 2
- c. Option 3
- d. None of those proposed – please provide your reasoning

We believe that both Option 1 and 2 are practical and will contribute towards improvements in air quality. We suggest that a blanket mandatory scheme is not appropriate, affordable or workable at this time and that effort would be better focussed on achieving better wood fuel quality and influencing behavioural change in the first instance.

Other initiatives in relation to household his would be timely and could potentially coincide with other house renewal support for energy efficiency and expansion of heat pump installation may also contribute to reduction in domestic fuel use and voluntary move away from stoves as a heat source.

Smoke Control areas (SCAs) (p25)

30. Would you agree that the use and coverage of SCAs should increase in order to better manage emissions from domestic burning?

We would support the increased use and coverage of SCAs to better manage emission from domestic burning.

31. If so in your opinion what additional coverage would be appropriate?

- a. Whole of Wales.
- b. Major centres of population (towns and cities over a certain population size).

c. Some other metric e.g. concentration of housing, level of deprivation, proximity to sensitive receptors.

We recommend an approach based on options b) and c). We believe that a whole Wales approach would disadvantage those that live in rural areas who are more likely to use stoves as the main heat source and be in an area where the ambient AQ does not justify the restrictions of a SCA.

Outdoor combustion

32. Do you agree the Welsh Government should consider available options to regulate the types of appliance and fuels that can be used in outdoor settings?

a. Yes

b. No

We suggest that regulation of the appliances and fuels used in an outdoor setting would be extremely difficult in practice. We recommend that the focus should be on ensuring cleaner fuels are available and that current legislative powers under SCA and nuisance legislations are utilised where needed.

There are also small commercial biomass plants that are below threshold in terms of environmental regulations but are funded by the Renewable Heat Incentive (RHI) scheme. The impact of these facilities could make a more significant impact on national air quality than outdoor domestic combustion activities that are carried out infrequently and whose local impact can be dealt with through existing legislation.

Additional comments not covered by questions above.

We have no additional comments.