

Cynulliad Cenedlaethol Cymru
Y Pwyllgor Newid Hinsawdd,
Amgylchedd a Materion Gwledig
Ansawdd Aer
NHAMC (5) AA04
Ymateb gan Cyfoeth Naturiol Cymru

National Assembly for Wales
Climate Change, Environment and
Rural Affairs Committee
Air Quality
CCERA(5) AQ04
Evidence from Natural Resources
Wales

Role of Natural Resources Wales

- 1.1 Our purpose is to ensure that the natural resources of Wales are sustainably maintained, used and enhanced, now and in the future.
- 1.2 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.
- 1.3 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.
- 1.4 Natural Resources Wales is committed to supporting local authorities to supporting the local authorities in achieving their responsibility relating to the attainment of the EU and UK Air Quality Standards / Objectives. We do so by regulating sites in line with the Environmental Permitting Regulations ensuring that their contribution to air pollution is minimised and does not lead to a breach of these objectives.
- 1.5 Natural Resources Wales are responsible for the production to the State of Natural Resources report every 5 years. This report informs the development of the Welsh Government national Natural Resources Policy as well as individual Area Statements.
- 1.6 We lead on the development of the Area Statements working with public bodies and other stakeholders across Wales.

Comments in relation to specific questions raised

2.1 What regulatory gaps or issues will need to be addressed after the UK leaves the EU? How should these be addressed and what will be the main challenges?

We are confident that the legislative provisions that have been put in place by Westminster and Welsh Government already will be sufficient to ensure that no major regulatory gaps or issues with the legislation will arise immediately post our departure from the EU.

After the UK leaves EU, we will not contribute to and be able to access the EU research work which informs their future legislative development. There is, therefore, a risk that we may not be able to develop adequate evidence to support our legislative development in Wales and the UK unless Welsh Government and UK Government set up similar provisions as those currently in the EU to develop the supporting evidence for future legislation/regulation.

NRW agrees that we need to ensure no lessening of the current EU air quality limit and target values which are enshrined in Welsh legislation as we move forward.

There is a suggestion within the Clean Air Plan that in Wales we may move towards WHO guideline values as targets / limits which are 'tighter' than those currently in Welsh legislation. Such

a change should be subject to an economic impact and environmental assessment and underpinned by legislation where appropriate.

A future Clean Air Act may need to be considered with regards those provisions and what that might mean for any functions arising from the new legislation, especially in relation to the enhancement of biodiversity. Particularly in the current context of declarations of climate and nature emergencies.

2.2 Are the Welsh Government's proposals for a Clean Air Act appropriate? How could they be improved? What can be learned from legislative approaches elsewhere?

In view of the current circumstances, the Welsh Government's proposal for a Clean Air Act is appropriate and we believe that the proposals will help deliver better air quality. This in turn will deliver other carbon and nature benefits.

All new developments should be required to evaluate the effect on air quality not simply from the point source emissions but also the potential for secondary pollutant formation. This is particularly relevant when considering ammonia from agricultural developments. This approach could help drive technological solutions and ensure that the design of any new development looks to prevent and mitigate its effects on air quality.

Scotland's approach to taking account of air quality at the planning stage may also be applicable in Wales. They are developing a regional model to support local authorities with regards to planning which will enable the cumulative impacts of developments on air quality to be assessed. This aspect is in the National Modelling Framework component of the Scottish Government Cleaner Air for Scotland strategy (CAFS) <https://www.gov.scot/publications/national-low-emission-framework/>

Air pollutants can affect the ecological resilience of biodiversity and ecosystem services, harm human health and contribute to climate change and its impacts, the links between these aspects need to be strongly emphasised in the implementation of any new Clean Air Act.

Setting tighter targets has a role but could also result in moving pollution away from current hot spots creating an increase in air pollution elsewhere, in the way that changing traffic routes can reduce air pollution in certain areas but does nothing to reduce the overall emission of pollutants.

NRW welcomes the inclusion of a plan to develop green infrastructure to contribute towards the reduction of air pollution and minimise climate change impacts. The benefits of green infrastructure could be further enhanced by ensuring that we have the legal framework to give protection to such infrastructure once its developed such as existing trees in the landscape, whether individual or in woodland settings. Currently these have very little protection in law and have been disappearing from field and hedgerows, often at a faster rate than any new plantings can mitigate for. We suggest that some form of legal protection or assessment requirement is given to more trees, removing the ability to fell them gradually without replacement. Consideration should also be given to legislative drivers that would encourage all farm woodlands to be fenced and free of stock, and for watercourses to be fenced and planted with some trees and shrubs where appropriate to the habitat.

Ammonia is a key pollutant both in terms of human health (secondary particulates) and impacts on biodiversity.

NRW has published information to quantify the impacts of ammonia from agriculture on our biodiversity. e.g. NRW Evidence Reports 218 and 298. These impacts pose the greatest short-term threat to biodiversity in Wales.

The Clean Air Plan consultation rightly identifies that 88% of the area of sensitive habitats exceed their critical loads for nitrogen deposition. The total UK deposition of nitrogen is currently more or less equally derived from emissions of oxides of nitrogen (NO_x) and ammonia (NH₃). NO_x is derived primarily from transport, industry, power generation and other combustion sources, while NH₃ is produced mainly from agricultural sources. Substantial pressure from UK and European policies over recent decades have resulted in a considerable reduction in NO_x emissions, with an expected decrease of 55% between 2005 and 2020. However, the latest data shows that in Wales ammonia emissions have increased significantly since 2008.

Therefore, many of the potentially more readily implemented measures that could reduce nitrogen deposition on protected sites are likely to be related to agricultural practices.

In response to the declared climate emergency in Wales consideration is being given to reducing air emissions (methane, nitrous oxide, ammonia) from agriculture to address climate change. Provisions to address nutrient (including nitrogen) pollution to water courses in Wales are due to be implemented this year. A holistic framework needs to be adopted to reduce nitrogen pollution to both air and water in Wales to ensure maximum efficacy clarity and avoid “pollution swapping”. A number of reports have highlighted the need to regulate emissions from cattle (and provisions for this have been set out in the UK (England Clean Air Strategy). This aspect is not included in the Wales Clean Air Plan despite the dairy sector and slurry spreading being two areas of increasing ammonia emissions identified in the National Atmospheric Emissions Inventory annual reports.

Excellent examples of successful cost-effective ammonia reductions have been demonstrated in the Netherlands and Denmark. Denmark has reduced ammonia emissions by 40% (1990-2016) and Dutch emissions have fallen by 64% in the same period. These major reductions were achieved with both countries maintaining financial competitiveness. It has been estimated that a range of existing measures, already used in other countries could be adopted in the UK. It is estimated that this would reduce ammonia emissions by at least 50% in the UK.

NRW has commissioned a study to examine “Application of Best Available Techniques to a wider range of livestock rearing. (NRW 2020-in press). Output from this work could be shared with WG to help inform ammonia reductions from this sector.

We would therefore recommend that consideration is given to legislation and policies to reduce the impact of agricultural ammonia on biodiversity in Wales.

2.3 What are your views on the regulatory proposals in relation to the Local Air Quality Management regime? What are the main challenges in relation the proposed approach?

NRW are generally supportive of the proposed changes, however, any additional requirements need to be funded and supported by technical expertise.

It is positive that there is an increased focus on PM_{2.5} and, due to the increasing body of research that links short term exposure to PM_{2.5} with negative health impacts, we would encourage Welsh Government to go further than just consideration of the National Emissions Ceiling Directive (NECD). Management of PM_{2.5} will need to be supported by local monitoring using equipment that can demonstrate equivalence to the standard reference method

We believe that identifying hotspot areas is central to the current LAQM approach. Expert knowledge on monitoring data analysis and modelling will be needed to provide a full picture of PM_{2.5} levels across Wales based on ambient air single point monitoring and meteorological data. This will enable the Local Authorities to better target improvements.

2.4 What are your views on the regulatory proposals relating to domestic combustion (including fireworks/bonfires), road vehicle idling and Clean Air Zones/Low Emission Zones?

Whilst the proposals for controlling emissions from domestic combustion are supported by NRW any legislative requirement is only effective if it assessed with regards compliance and enforced. If there is a reliance on legislation to deliver outcomes then resource will need to be provided to appropriately enforce that legislation.

Legislating against all but the “least polluting appliances” or using exempt fuels will not remove the PM_{2.5} burden, just reduce it. However, NRW appreciates that domestic wood burning is important in Wales as a source of space heating for a high number of properties, particularly those off the gas grid.

We consider wood fuel to be a sustainable energy source providing it comes from properly managed woodlands, or is a waste product, and is burned cleanly and efficiently to minimise pollution, especially, particulate matter.

On balance, the Welsh Government proposal within the consultation to set measures to ensure that where wood fuel is burnt in a domestic setting the fuel type/quality and burning process minimises particulate emissions is a good pragmatic approach.

Establishing Smoke Control Areas should be more prescribed and based on a specific set of criteria which includes local measurements and assessment of harmful pollutants such as PM_{2.5}, which are not necessarily associated with visible “smoky” plumes.

Significant investment into public transport will be needed in order to encourage changes in public behaviour away from personal car use. Such investment should be initially be within areas of known air pollution such as the LAQM and Clean Air Zones.

2.5 What are the main challenges in introducing a legislative framework for air quality as set out in the consultation document?

NRW believe that the main challenges in introducing a legislative framework for air quality will be to ensure that the legislation is based on adequate evidence, including local factors to understand the impact. For example, a challenge in achieving the objectives for reducing emissions due to road traffic by increasing parking charges etc. is that the surrounding infrastructure and public transport capacity may not be adequate to handle the increased passenger numbers that would result from individuals refraining from using their own transport.

Public transport and active travel are key to many of the air quality issues in Wales, we believe that an integrated transport system needs to be developed to maximise the benefits that can be realised.

In addition, a reduction in limit values may lead to a larger number of areas in Wales requiring focus on Air Quality improvements. This will require greater resource to manage and some of the solutions may have both negative social and economic impacts.

Therefore, we would recommend that evaluation of the costs and benefits needs to be part of the legislative framework.