

Agenda – Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith

Lleoliad: I gael rhagor o wybodaeth cysylltwch a:
Ystafell Bwyllgora 4 Tŷ Hywel a **Marc Wyn Jones**
fideogynadledd drwy Zoom Clerc y Pwyllgor
Dyddiad: Dydd Mercher, 17 Mai 2023 0300 200 6565
Amser: 09.30 SeneddHinsawdd@senedd.cymru

Rhag-gyfarfod preifat (09.15–09.30)

Cyfarfod cyhoeddus (09.30–12.00)

1 Cyflwyniad, ymddiheuriadau, dirprwyon, a datgan buddiannau

2 Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) – sesiwn dystiolaeth 6

(09.30–10.40)

(Tudalennau 1 – 54)

Haf Elgar, Cyfarwyddwr – Cyfeillion y Ddaear Cymru

Jenny Hawley, Rheolwr Polisi, Plantlife – yn cynrychioli Cyswllt Amgylchedd Cymru

Nadia De Longhi, Pennaeth Rheoleiddio a Thrwyddedu – Cyfoeth Naturiol Cymru

Eirian MacDonald, Rheolwr Rheoleiddio'r Dyfodol – Cyfoeth Naturiol Cymru

Dogfennau atodol:

Briff Ymchwil

Papur – Cyfeillion y Ddaear Cymru (Saesneg yn unig)

Papur – Cyswllt Amgylchedd Cymru (Saesneg yn unig)

Papur – Cyfoeth Naturiol Cymru (Saesneg yn unig)

Egwyl (10.40–10.50)



3 Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) – sesiwn dystiolaeth 7

(10.50–12.00)

(Tudalennau 55 – 61)

Kristian James – Aelod o'r Sefydliad Siartredig Iechyd yr Amgylchedd (CIEH)

Colin Cobbing – Cyfarwyddwr Pinnacle Acoustics Consultants, ac Aelod o'r Sefydliad Siartredig Iechyd yr Amgylchedd (CIEH)

Dogfennau atodol:

Papur – Sefydliad Siartredig Iechyd yr Amgylchedd (Saesneg yn unig)

4 Papurau i'w nodi

(12.00)

4.1 Y Cytundeb Cysylltiadau Rhyngsefydliadol: y Pwyllgor Sefydlog

Rhyngweinidogol ar Drafnidiaeth

(Tudalennau 62 – 63)

Dogfennau atodol:

Llythyr gan y Dirprwy Weinidog Newid Hinsawdd at Gadeirydd y Pwyllgor

Deddfwriaeth, Cyfiawnder a'r Cyfansoddiad mewn cysylltiad â'r Pwyllgor

Sefydlog Rhyngweinidogol ar Drafnidiaeth

5 Cynnig o dan Reol Sefydlog 17.42(vi) a (ix) i benderfynu gwahardd y cyhoedd o weddill y cyfarfod

(12.00)

Cyfarfod preifat (12.00–12.30)

6 Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) – trafod y dystiolaeth a ddaeth i law o dan eitemau 2 a 3

**7 Trafod y Memorandwm Cydsyniad Deddfwriaethol Atodol ar y Bil
Ffyniant Bro ac Adfywio – sesiwn friffio cyfreithiol**

(Tudalennau 64 – 69)

Dogfennau atodol:

Nodyn cyfreithiol (Saesneg yn unig)

Mae cyfyngiadau ar y ddogfen hon

AQS 37 Friends of the Earth Cymru

Senedd Cymru | Welsh Parliament

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith | Climate Change, Environment, and Infrastructure Committee

Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) | The Environment (Air Quality and Soundscapes) (Wales) Bill

Ymateb gan Cyfeillion y Ddaear Cymru | Evidence from Friends of the Earth Cymru

1. What are your views on the general principles of the Bill, and is there a need for legislation to deliver the stated policy intention?

Introduction:

Friends of the Earth Cymru is pleased to have the opportunity to respond to this consultation on this important matter.

Friends of the Earth Cymru has campaigned on the issue of air pollution as a major public health crisis for many years (<https://foe.cymru/clean-air>) and we are proud members of Healthy Air Cymru (<https://healthyair.cymru/>) and endorse their submission to the committee.

We are particularly concerned about the disproportionate health effect of air pollution on vulnerable groups, as per our recent data research (https://foe.cymru/sites/default/files/Air%20pollution%20research%20Wales_bilingual%20%281%29.pdf) - and see it as a key environmental and social justice issue. And also on the impact of air pollution on the environment, particularly on climate change (eg as set out here <https://www.ccacoalition.org/en/content/short-lived-climate-pollutants-slcps>) and local environment and ecosystem damage.

As part of Healthy Air Cymru we have campaigned for a 'Clean Air Act' since 2017, specifying that it should include:

- Enshrining WHO air quality guidelines in law
- Mandating the Welsh Government to produce a statutory air quality strategy every 5 years
- Provide a statutory duty on local authorities to appropriately monitor and assess air pollution, and take action against it
- Introduce a 'right to breathe' whereby local authorities are obliged to inform vulnerable groups when certain levels breach recommended guidance

We are pleased that over the years there has developed strong cross-party support for legislating in this area and that we now have a Bill presented by the Welsh Government for scrutiny and discussion. We fully support this Bill, and look forward to working with the committee in order to ensure that strong and effective legislation is passed which is in line with the gravity and urgency of the problem.

Key points:

- There is much to welcome in this Bill and we fully support the principles and intentions of this legislation.
- There are key issues to be addressed, in particular:
 - a) There needs to be an additional requirement to set new target(s) for NO₂ as World Health Organisation (WHO) Air Quality Guidelines (AQG's) for this pollutant have

been considerably lowered not long ago - from 40ug/m³, which is still the legal limit in Wales, down to 10ug/m³ for an annual average.

- b) It must be set out in the Bill as a requirement that targets must be set to be consistent with WHO AQGs - as the Explanatory Memorandum/EM states at 3.13 is an existing commitment of the Welsh Government.

2. What are your views on the Bill's provisions (set out according to sections below), in particular are they workable and will they deliver the stated policy intention?

2.i) National air quality targets (sections 1 to 7)

These are in our view the most important sections in the proposed legislation and crucial that we ensure that they are as strong as effective as possible.

We believe there are some key changes needed in these sections in order to achieve that aim.

The evidence on the terrible health effects of air pollution continues to grow, and has recently been reviewed by Imperial College London (<https://www.london.gov.uk/sites/default/files/2023-04/Imperial%20College%20London%20Projects%20-%20impacts%20of%20air%20pollution%20across%20the%20life%20course%20%E2%80%93%20evidence%20highlight%20note.pdf>) – the need for urgent action could not be clearer.

Further, air pollution is a health inequalities issue – failure to address it adequately betrays the most vulnerable in our society who often have done least to contribute to the problem. Friends of the Earth's recent data analysis (https://foe.cymru/sites/default/files/Air%20pollution%20research%20Wales_bilingual%20%281%29.pdf) clearly shows that air pollution disproportionately impacts lower income and more deprived areas and affects neighbourhoods with higher ethnic minority populations.

Changes to the Bill needed:

- i. Requirement for new target(s) on Nitrogen Dioxide (NO₂), to be required to be consistent with WHO AQGs.**

We welcome the requirement for a new PM_{2.5} target, which is much needed as for too long UK requirements on this most health damaging air pollutant have been far too low, and well below WHO AQGs.

However NO₂ is also a serious health hazard and the current NO₂ legal annual Limit Value is still not being met across the whole of Wales – the South Wales Air Quality Zone is still failing in Defra's latest assessment for air in 2021 (<https://uk-air.defra.gov.uk/library/annualreport/index>), against a requirement of 2010 or 2015 at the latest.

However the level for the annual mean in current requirements for NO₂ is 40ug/m³, which was also the WHO AQG until the AQGs were revised in September 2021, when a new AQG of 10ug/m³ was set (<https://www.who.int/publications/i/item/9789240034228> Table 0.1). NB the UK Environment Act process was started prior to the new WHO AQGs coming out.

New NO₂ target(s), required to be consistent with the new WHO AQGs, are needed.

While Section 1 would allow this, it doesn't require it and is thus not adequate. A new section could perhaps be inserted between the current Sections 2 and 3.

ii. Other pollutants eg Ozone (O₃) – consideration should also be given for new target(s), required to be consistent with the new WHO AQGs

The WHO AQGs 8 hr mean for O₃ is 100ug/m³, whereas the current legal limit in Wales is 120ug/m³ – and the WHO has a peak season level of 60ug/m³.

iii. Target setting process - requirement for all targets to be consistent with WHO AQGs

We also welcome Section 3 on target setting - however we consider that the Bill must specifically reference a requirement for all target(s) to be consistent with WHO AQGs, as is an existing commitment:

“Our Programme for Government for 2021 to 2026 reiterated our commitment to introduce a Clean Air Act for Wales, consistent with World Health Organization (WHO) guidance and to extend the provision of air quality monitoring. This will include taking account of the latest scientific information, including the updated WHO guideline levels, alongside taking independent expert advice, to inform the development of new air quality targets.” (Explanatory Memorandum/EM 3.13.)

iv. Introduction of target(s):

Section 3(8) refers to a period of 3 years to lay a draft SI on setting a (PM_{2.5}) target – but this seems an undue amount of time, resulting in considerable delay in action.

v. Reporting on targets:

Section 5(5) refers to the report needing to set out how the standard will be achieved 'as soon as reasonably practicable' – this should instead be framed as needing to be achieved for instance in the shortest time possible.

vi. Review of targets:

While it is welcome that Section 6 sets out 5 yearly reviews of targets, perhaps a refinement setting out eg “but earlier if scientific information indicates” would make it more robust.

Improvements in monitoring are also welcome and needed but adequate funding is needed so that Local Authority monitoring can be of a quality that it can be suitable for legal compliance assessment.

2.ii) Promoting awareness about air pollution (section 8)

Any advancements in promoting awareness on this issue are to be welcomed, but even more could be set out.

- a) The Prevention of Future Deaths report on the tragic early death of Ella Kissi-Debrah (<https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf>), at 5 (2) and (3) sets out deficiencies in awareness and communications around air pollution. This includes specific reference to the medical profession: “The adverse effects of air pollution on health are not being sufficiently communicated to patients and their carers by medical and nursing professionals” – and perhaps this point could be specifically referred to in the Bill.
- b) Air pollution alerts are crucial for when the air is particularly bad so that particularly vulnerable people can avoid exposure – it must be ensured that all key pollutants are covered by alerts (whereas Defra do not currently include alerts on PMs)

We believe that promoting awareness about air pollution should also include promoting behaviour change solutions to reduce pollution such as a modal shift to active travel and public transport. This would also help progress targets in the Wales transport strategy Llwybr Newydd and our progress to net zero.

2.iii) National air quality strategy (sections 9 to 11)

It is noted (as at 3.89 of the EM) that the Welsh Government proposed 5 yearly reviews ahead of such a requirement from the 2021 UK Environment Act - and this along with the proposals for flexibility on timing to suit Senedd timings, on consultation, and for a duty on relevant Welsh public authorities are welcome.

However we are concerned that the way this proposal is drafted in the Bill itself may cause confusion, as it seeks to amend the UK Environment Act 1995. We would seek clarification during the Bill scrutiny process or redrafting of this section (and consequential amendments to sections 10 & 11). However we are satisfied with the intention of the Welsh Government.

The proposed requirement under 81B (1) in Section 11 (1) to just ‘have regard to’ the policies in the strategy is unnecessarily weak – we would like to see the requirement strengthened so that exercising functions that could affect air quality were compatible with the policies and reflected them. The aim must be that the meeting of targets is not jeopardised – and indeed new breaches of limits should not be allowed, nor existing ones worsened. Also it is not clear whether the above duty would include decision making eg on planning applications, but it should unless covered elsewhere.

2.iv) Air quality regulations (section 12)

We welcome enhanced requirements to consult.

2.v) Local air quality management (sections 13 to 15)

LAQM is a weak requirement ie much weaker than that for meeting legal Limit Values, as effectively acknowledged in the EM - thus the aims and ambitions of the Bill are welcome.

Section 14 (1), under proposed 83B (3) on action plans and timescales for achievement should be for as short a timescale as possible.

As above, adequate funding must be available for enhanced local authority monitoring, including so that it can be used for legal compliance assessment.

We are not clear how this local reporting cycle aligns with the proposed Welsh Government reporting cycle and would welcome clarification during the scrutiny process.

2.vi) Smoke control (sections 16 to 18)

This is certainly an area which needs enhanced requirements and action and we welcome its inclusion in this Bill.

We understand that not all of the actions necessary in this area require primary legislation – that some powers already sit with Welsh Government and that others relate to behaviour change. However we would seek clarity during the scrutiny process on how the government intends to make the changes which do not appear on the face of the Bill.

The Welsh Government should set out that it will prepare options for moving away from domestic solid fuel burning. This will take some time and require consultation on possible options such as whether a ban would apply to eg urban areas / anywhere on the gas grid / for anywhere over WHO AQGs for PM2.5s.

It should be made clear under 16(2) at 19G (1) and 19H(2) that exemptions cannot be at the risk of air quality targets being jeopardised.

We are unclear whether the Welsh Government intends to expand smoke control areas.

2.vii) Vehicle emissions (sections 19 to 21)

Vehicle emissions is one of the biggest contributors to air pollution and we welcome including these sections in the Bill.

While this section covers some important points, the big picture on requirements and action needed must be kept at the forefront and updated as needed. This includes on the level of demand management needed and overall targets for cutting car and vehicle miles driven (essential for both air pollution and climate targets) – and to this end the Welsh Government

needs to set out its timeline for expediting “fair and equitable road user charging” as referred to in the EM under this section.

It also includes the need to not add to the problem unnecessarily of air pollution and climate emissions with new road building, in line with the recent report of the independent road review panel.

We understand that only trunk road charging is included rather than clean air zones and urban areas due to the Welsh Government’s competencies, but in order to achieve the desired reduction in air pollution there needs to be coordination to ensure that cars or other vehicles aren’t simply diverted from one road system to another route, causing knock on effects.

We welcome the anti-idling measures, but would welcome clarification on enforcement of this offence.

2.viii) National soundscapes strategy (sections 22 and 23)

2.ix) Strategic noise map and noise action plans (sections 24)

2.x) General provisions (sections 25 to 28);

3. What are the potential barriers to the implementation of the Bill’s provisions and how does the Bill take account of them?

As mentioned previously, there could be greater clarity as to national and local responsibilities and the relationship between them.

4. How appropriate are the powers in the Bill for Welsh Ministers to make subordinate legislation (as set out in Chapter 5 of Part 1 of the Explanatory Memorandum)?

We agree that the setting of air quality targets is suitable for subordinate legislation, but with tighter conditions as set out in earlier questions.

5. Are any unintended consequences likely to arise from the Bill?

6. What are your views on the Welsh Government's assessment of the financial implications of the Bill as set out in Part 2 of the Explanatory Memorandum?

7. Are there any other issues that you would like to raise about the Bill and the accompanying Explanatory Memorandum or any related matters?

We understand the reason for changing the name of the Bill from the expected 'Clean Air Bill', in particular in relation to the inclusion of soundscapes. However as public engagement, understanding and action is particularly important for this legislation to be effective we would welcome a simpler name being used publicly.

This would also avoid confusion with the existing Environment (Wales) Act 2016 which relates to very different issues.

AQS 13 Wales Environment Link

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Ymateb gan Cyswllt Amgylchedd Cymru | Evidence from Wales Environment Link

The Environment (Air Quality and Soundscapes) (Wales) Bill

28th April 2023

Summary

WEL is pleased to see the Environment (Air Quality and Soundscapes) Bill introduced, with air quality affecting wildlife and ecosystems, as well as public health.

However, we do question the order of legislation coming forward; as we continually highlight the absence of an independent environmental governance body, which the Welsh Government has promised along with targets for nature's recovery i.e. a 'Nature Positive Bill'. The future new governance body will have a key role to play in holding government to account in relation to air quality targets (equivalent to the role the Office for Environmental Protection plays in England); it is regrettable that, due to ongoing delays in bringing forward environmental governance legislation, this role will have to be added to the air quality framework at a later date.

We welcome tackling fine particular matter (PM2.5) and nitrogen dioxide, but we are very concerned that this Bill overlooks action to tackle pollution from ammonia. It is increasing in severity, with 93% of sensitive wildlife habitat experiencing higher nitrogen levels than it can tolerate ([CEH Trends Report 2022](#)). The Explanatory Memorandum does acknowledge that: "Air pollution contributes to acidification of soil and surface water, eutrophication in sensitive habitats and damages vegetation through exposure to ozone" and that "poor air quality can also adversely affect wildlife through widespread changes to species distribution and the quality of habitats". It does set out estimate costs for monitoring ammonia, which is welcome. However, as the Bill only specifies PM2.5 targets, and the rest are left to the discretion of Welsh Ministers in setting regulations, we cannot guarantee it will be considered; we have therefore included proposals to tackle ammonia pollution and its impacts below.

General Principles

WEL welcomes the introduction of legally-binding targets as current targets under the EU National Emissions Ceiling Directive (NECD) expire in 2030. We strongly support the targets to be reviewed at least every five years, although we would suggest that some elements (such as nitrogen dioxide and ammonia emissions) may benefit from more regular scrutiny, particularly in the first term of the plan.

The initial deadline of '3 years from Royal Assent' for the first set of targets is overly long and does not match the urgency which the Explanatory Memorandum sets out. We would suggest that a shorter timeframe would be better, to add more priority to this important and delayed process. Ideally, it should mirror the UK Government's corresponding targets deadline of a year to introduce. The subsequent [short delay](#) of two months – the Environment Act 2021 in Westminster said they must be put before parliament by 31st October 2022 – saw them [set out in December 2022](#). The example set here shows it's important to have ambitious deadlines so it is assured to be a government priority in the years ahead.

Binding targets should serve as a catalyst for action, in the same way that statutory recycling targets propelled us to achieve world-leading recycling rates. WEL believes that binding targets on major pollutants will have a similar effect and will kickstart progress where voluntary efforts have been unsuccessful.

However, it would be better if it included commitments on nitrogen oxides and more specifically ammonia (NH₃).

The Bill should place a duty on the Welsh Government to set additional targets, particularly for ammonia

Almost 69% of Wales' total land area receives ammonia concentrations above the critical level set to protect lichens, mosses, liverworts and other bryophytes – keystone species that are vital to ecosystems and many of which are threatened. Unprecedented concentrations of reactive nitrogen have built up in the atmosphere, mainly due to ammonia emissions (NH₃) from intensive farming practices and nitrogen oxide (NO_x) emissions from combustion (in transport, industry and other

sources). Reactive nitrogen in the air can be deposited close to its source or can travel long distances; this is impacting all kinds of wildlife habitats, from coastal sand dunes to the tops of our mountains. Ammonia emissions also contribute to the formation of particulate matter, which damages people's health, and are closely linked to emissions of nitrous oxide and methane, both greenhouse gases.

The air quality chapter of the [SoNaRR \(State of Natural Resources\) report](#) states that 88% of sensitive wildlife habitat has higher nitrogen levels than it can tolerate, upsetting the delicate balance of the ecosystem, and almost 60% of habitats or species features in European protected sites are adversely affected by nitrogen deposition – figures from a more recent analysis paint an even worse picture (CEH Trends Report 2022). A few vigorous plant species (such as nettles and brambles) thrive, but more than two-thirds of wildflowers, as well as many rare and endangered lichen and fungi, are unable to survive in high nitrogen conditions. In extreme cases, concentrated ammonia emissions are causing spectacular lichens such as eyelashes treebeard (*Usnea florida*) to be coated in algal slime. More evidence of this can be found in Plantlife's report: [We Need To Talk About Nitrogen](#).

The Woodland Trust has [highlighted](#) how much ancient woodlands can also be impacted by nitrogen pollution, outlining: *"In 2014, 90% of the internationally important habitat in Special Areas of Conservation (SACs) in England and Wales received excessive levels of nitrogen. The situation is probably even worse for ancient woodlands as a whole, with critical loads for nitrogen exceeded for 92-98% of all UK woodlands"*. Their technical advice note sets out an assessment process that can reduce the worst impacts to help Local Planning Authorities to mitigate the effects on woodland areas and other priority habitats.

In December 2022, the long-awaited Convention on Biological Diversity COP15 summit agreed the Kunming-Montreal [Global Biodiversity Framework](#). It embeds a global mission to halt and reverse the loss of nature by 2030 and achieve recovery so that, by 2050, nature is thriving once more, "sustaining a healthy planet and delivering benefits essential for all people". This is in line with the [Nature Positive](#) goal called for by organisations around the world in the years leading up to COP15.

The new Global Framework includes outcome-oriented goals and targets, to: halt extinctions and recover species abundance; tackle ecosystem loss; restore degraded

ecosystems; effectively protect and manage 30% of land and sea (the '30 by 30' target); reduce pollution from all sources; and drive sustainable production.

Taking action to reduce atmospheric ammonia is essential if the Welsh Government is to meet these commitments to biodiversity. Although we recognise that the proposed PM2.5 targets would also help to reduce ammonia levels, we urge for ammonia to be considered specifically, due to its increasing prevalence and devastating impacts on human and ecosystem health. Tackling nitrogen deposition is essential if Wales is to restore and protect its rich biodiversity assets.

Strategic links should also be made with policy action on Climate Change and the Decarbonisation agenda. This would not only serve to recognise the contribution of many major pollutants as direct contributors to global warming but would also expand the potential for awareness raising campaigns. These links would also facilitate regular reviews, as air pollution levels can be used as a key indicator for Government across a spectrum of policy areas.

We are clear that specific action to tackle ammonia will be necessary to achieve the Government's biodiversity and public health ambitions, in addition to action focused on PM2.5. A recent scientific paper concludes that "Action plans aimed at national agricultural sources of NH₃ and strengthened supranational agreements would be most effective at alleviating PM_{2.5} in most UK cities" ([Kelly et al, 2023](#)). We strongly recommend legally-binding targets for ammonia to be introduced at the same time as PM2.5 targets to drive policy change and practical action.

Monitoring and enforcement will also be essential to drive ammonia levels down. Part of the issue relates to monitoring of farm planning conditions, which is currently falling into a large responsibility gap: NRW states that LPAs are responsible for monitoring compliance with farm planning conditions, and yet LPAs do not have the capacity or (often) expertise to do this job properly. The Welsh Government needs to review this situation and design a solution to ensure that the responsibility for monitoring agricultural pollution is clearly attributed to an authority (our preference would be for this to be NRW's responsibility) and that the responsible body has the resources and expertise in place to do this job properly. We support increasing capacity, training and resources for permitting and advisory staff in NRW and local authorities to implement the regulations.

Overall, we think that there is a missed opportunity in the proposals for this Bill to legislate for some actions that would immediately start to tackle the problem of both ammonia (and consequently PM2.5) and we recommend an agriculture section be added to the Bill. Examples of actions include:

- mandatory covering of slurry storage tanks and lagoons, as they have done in England, with the potential for capital grants to support their installation if necessary;
- including a minimum target for 20% urban tree coverage;
- lowering the threshold for environmental permits for poultry units from 40,000 birds to 999;
- requiring environmental permits for other emissions sources, particularly large and indoor cattle units; and
- banning splash plates, and requiring appropriate technologies i.e. trailing shoe.

Extending the environmental permitting regime to dairy and intensive beef farms, as proposed in England, and reducing the permitting threshold for poultry units, should be pursued as a priority in Wales. The introduction of permitting would ensure that such farms adopt best available techniques (such as those detailed below) for reducing ammonia emissions, as well as providing a clearer framework for their monitoring and inspection. It would also ensure farms which invest in ammonia reduction measures are not disadvantaged by those who do not.

We would also support consideration of rural/ecological AQMAs/LAQMs or 'Clean Air Zones for Nature', specifically to tackle the increasing problem of ammonia pollution from farms and to embed action on rural pollution and its impacts on biodiversity within public debates, policy and communications in the air quality sector.

Ways ammonia can be reduced

The new Sustainable Farming Scheme is a clear opportunity to align air quality goals with agriculture practices, and the UK Centre for Ecology and Hydrology has [set out](#) several kinds of management measures to reduce ammonia emissions from agriculture, including:

- Housing floor systems to remove cattle/pig manure (20 – 46% reduction)

- Slurry spreading systems – trailing shoe (30 – 60% reduction) or disc injector (70 – 90% reduction)
- Covering slurry stores with tight lid (80% reduction) or floating cover (60% reduction)
- Drying of poultry manure (35 – 45% reduction)
- Tree planting as shelter and grazing areas to capture N and increase dispersion (20 – 25% reduction) to protect semi-natural areas downwind of ammonia sources. (More on that [outlined here](#)).

The governance gap

As mentioned above, this Bill starkly highlights the environmental governance gap that exists in Wales. In March 2021, the Court of Justice of the EU [ruled](#) that the UK had systematically and persistently failed to fulfil its obligations under EU rules on air quality (after the European Commission started proceedings against the UK in 2014). Failures on air quality standards, by both UK and Welsh Governments, have also been challenged successfully in the domestic courts by Client Earth.

This Bill establishes a framework for Ministers to set air quality targets and includes a process for Reporting on Targets (clause 5), under which Ministers have to report to the Senedd as to whether or not a target has been met. If a target has not been met, Ministers have to lay before the Senedd a report explaining why not, and the steps to be taken to rectify this.

The equivalent framework for England (under their 2021 Environment Act) goes further, and includes an additional layer of scrutiny: the OEP (Office for Environmental Protection) reports regularly ([e.g. this report on improving England's natural environment](#)) on the UK Government's progress including assessing compliance with targets and commenting on the adequacy of policy measures to meet them. The UK Government is required to respond to the OEP's recommendations.

The OEP will also be able to consider any future challenges or complaints from citizens about failures to deliver on air quality targets, by the UK Government or other public bodies in England, filling the vitally important gap of providing access to justice for citizens once more. The Interim Assessor for Wales does not have the

powers or remit to do either of these things. Until we have fixed this gap through legislation, the risk of environmental damage gone unchecked will only increase.

It is regrettable that the Welsh Government has continued to delay bringing forward legislation to address the governance gap, after Ministers accepted the recommendations of a specially convened stakeholder group in 2020. To ensure the new air quality and soundscapes frameworks can operate effectively and deliver clear improvements for the people of Wales, the Welsh Government must commit to bringing the 'Nature Positive Bill' forward without further delay.

Soundscapes

We welcome that this Bill will address soundscapes, treating them as a pollutant in line with literal pollutants. Noise quality is also very important to wildlife, with [one study highlighting](#) that “to date, noise pollution has been considered in terms of impacts on human health, but very little or no consideration has been given to impacts on other species and ecosystems.” A [meta-analysis showed](#) that “anthropogenic [human created] noise affects species of all taxonomic groups”, which included both aquatic and terrestrial species. They outline: “These clear-cut effects of noise are particularly important from a conservation point of view, because it shows that noise affects not only a few species that we need to pay attention to but many species that inhabit very different ecosystems.”

Reducing noise pollution is not only good for both human and wildlife health, but by reducing that human created noise, natural background sound will be enhanced and better appreciated. The Natural History Museum has [found](#) that bird song can offer people “relief from mental fatigue and stress”, which was echoed by another study finding that participants’ mental wellbeing increased when they saw or heard birds, including amongst those diagnosed with depression. It suggests that having natural noise able to come through amongst quieter urban environments can both help people’s general wellbeing, and improve the mindset of those with mental health problems.

Wales Environment Link (WEL) is a network of environmental, countryside and heritage Non-Governmental Organisations in Wales. WEL is a respected intermediary body connecting the government and the environmental NGO sector. Our vision is a thriving Welsh environment for future generations.

This paper represents the consensus view of a group of WEL members working in this specialist area. Members may also produce information individually in order to raise more detailed issues that are important to their particular organisation.



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Tudalen y pecyn 50

AQS38 Natural Resources Wales,

Senedd Cymru | Welsh Parliament

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith | Climate Change, Environment, and Infrastructure Committee

Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) | The Environment (Air Quality and Soundscapes) (Wales) Bill

Ymateb gan Cyfoeth Naturiol Cymru | Evidence from Natural Resources Wales

General principles

What are your views on the general principles of the Bill, and is there a need for legislation to deliver the stated policy intention?

NRW supports the general principles of The Environment (Air Quality and Soundscapes (Wales)) Bill. We agree that the Bill is only one package of measures to achieve these goals.

What are your views on the Bill's provisions (set out according to sections below), in particular are they workable and will they deliver the stated policy intention?

National air quality targets (sections 1 to 7)

NRW welcomes the provision within the Bill to set new air quality targets and development of a national strategy for soundscapes.

NRW are supportive of the development of air quality targets to support public health improvements and to maintain and enhance our ecosystems and biodiversity. We believe that these measures will provide a legislative framework to require and encourage initiatives to deliver air quality improvements across Wales.

We note the specific intention to set a target for PM2.5 which is welcomed.

We also ask that WG consider setting air quality targets for ammonia, not only to protect our sensitive habitat, but also as ammonia is a key contributor to the formation of secondary particulate formation, a significant contributor to PM2.5 levels across Wales. We support the requirement for a regular review period and believe that this will encourage a continuous improvement approach to air quality in Wales.

We believe that input from the Welsh Government Clean Air Advisory Panel (CAAP) will be key in ensuring that the correct targets and metrics are devised to maximise the improvements that can be achieved.

We would encourage WG Air Quality branch to identify synergies with other new legislation and work in conjunction with new incentives such as the Sustainable Farming Scheme that is due to launch in 2025 to ensure that air quality improvements are optimised. It is critical for a range of

schemes and incentives to work in conjunction with these regulations, to maximise the improvements to air quality in Wales.

Promoting awareness about air pollution (section 8)

NRW believe that promoting awareness of air quality and soundscapes and their importance in relation to environment, health and wellbeing is critical to engaging the public in contributing towards air quality and soundscape improvements in Wales.

NRW considers air quality and soundscape as part of the State of the Natural Resources Report (SoNaRR) and our contribution to the Noise and Soundscape Action Plan (2018 -2023) respectively. These documents will supply robust data to use as the basis of an awareness campaign.

We believe that a Behavioural Insights approach is vital to the success of any communication so that the public and organisations are encouraged to maximise their contribution to air quality improvements

National air quality strategy (sections 9 to 11)

NRW welcomes the proposed approach that each Welsh Government should set out their aims in relation to air quality in the form of a Clean Air Plan / Air Quality strategy in the first half of the Senedd term. It is also positive that it is proposed that the frequency of publication of such documents can be flexible to account for extra-ordinary Senedd elections.

We agree with the intention to mirror the Section 81A duty, which applies to public bodies in England, to require public bodies in Wales to have regard to the Clean Air Plan when carrying out their duties. This will facilitate a more integrated approach to air quality management across Wales.

We acknowledge and support the need to consult the specific public bodies that will be given this additional duty on the development of the Clean Air Plan at the start of each Senedd term.

Air quality regulations (section 12)

We welcome the broadening and setting out in legislation of a requirement to consult with the Local Authorities, Public Health Wales, Local Health Boards and the public on new legislation brought under Part IV of the 1995 Act. We agree that this should lead to more robust legislation.

The broadening of the consultation on the Air Quality Strategy and the review of the National soundscape strategy to a wider range of public bodies is also welcomed and should ensure a greater understanding and contribution from all public bodies in relation to the achievement of the objectives of these strategies.

Local air quality management (sections 13 to 15)

NRW supports the change in approach on local air quality management from being purely target based to become more preventative and focused on achieving the best air quality possible. This change in approach will maximise the improvements in public health.. NRW will continue to work alongside Local Authorities in relation to air quality management providing information and reports on air quality investigations and regulatory activities relating to our regulated sites.

Smoke control (sections 16 to 18)

We recognise that increased powers for Local Authorities on smoke control and controls on use of solid fuels could contribute significantly to reductions in PM2.5 concentrations in urban areas, and as

such would support the achievement of future targets for this pollutant. It is important to note that in the current climate of fuel poverty, introductions of smoke control areas need to be consulted widely and reviewed within Public Service Boards to ensure that controls and mitigation measures are proportionate and vulnerable communities that rely on solid fuel to heat their homes are supported.

Vehicle emissions (sections 19 to 21)

NRW agrees that the proposal will support air quality improvements. In order to maximise the benefits the introduction of Clean Air Zones needs to be supported by an effective public transport infrastructure and active travel options..

We believe that penalty notices and fines should be used to fund further improvements in public transport infrastructure or active travel initiatives.

We would recommend that the locations of Clean Air Zones should be reviewed regularly as pollutant concentrations change.

We suggest that the timeline for introduction of penalty notices should be aligned with improvements to public transport and active travel infrastructure.

National soundscapes strategy (sections 22 and 23)

NRW supports the alignment of the timeline for the Air Quality strategy and the National soundscapes strategy. This enables the synergies between the two strategies to be fully explored giving optimal benefits.

Strategic noise map and noise action plans (sections 24)

NRW are supportive of the introduction for increased flexibility in options to change timescales for the development of noise maps and review of noise action plans. This could support the soundscape strategy and can be utilised flexibly in its review timetable to align with new industrial and domestic developments.

The ambitious Net Zero (decarbonisation) targets introduced by Welsh Government will potentially deliver an accelerated change to the environment and it is important that noise plans can evolve at the same rate of change, as technology changes to improve air quality it also has the potential to reduce noise impacts.

General provisions (sections 25 to 28);

NRW agrees that the Bill provides Welsh Government with adequate powers to implement key regulations to enhance and improve both air quality and soundscapes in Wales.

What are the potential barriers to the implementation of the Bill's provisions and how does the Bill take account of them?

NRW recognises the barriers identified within the consultation documents and the regular reviews and broader consultation aspects that contribute towards the management of those barriers.

We have not recognised any additional barriers at this time.

How appropriate are the powers in the Bill for Welsh Ministers to make subordinate legislation (as set out in Chapter 5 of Part 1 of the Explanatory Memorandum)?

We have no comment on this part of the consultation.

Are any unintended consequences likely to arise from the Bill?

It is important to note that the aim of the Bill is to improve air quality and soundscapes in Wales which also includes supporting the Nature emergency and enhancing the natural environment which in turn supports the wellbeing goals. Any new strategies need to be considered holistically and consulted upon widely to ensure that any unintended consequences are managed.

What are your views on the Welsh Government's assessment of the financial implications of the Bill as set out in Part 2 of the Explanatory Memorandum?

We note that the costs of the additional compliance activity required by the Local Authorities is acknowledged within Part 2 of the Explanatory Memorandum.

It should also be recognised that any additional requirements made of NRW in relation to increased consultation and technical advice for air quality and soundscapes as a result of the Bill will need additional resource to fulfil.

Are there any other issues that you would like to raise about the Bill and the accompanying Explanatory Memorandum or any related matters?

NRW are supportive of the Bill, as it has the potential and ambition to improve air quality and soundscapes in a consistent and structured manner with regular reviews to ensure that the main goals are always in sight for an enhanced environment for the people and biodiversity of Wales. The Bill aligns in supporting NRW's delivery of our wellbeing objectives – Nature is recovering, Community Resilience to Climate Change and Pollution is minimised.

AQS 08 Chartered Institute of Environmental Health (CIEH)

Senedd Cymru | Welsh Parliament

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith | Climate Change, Environment, and Infrastructure Committee

Bil yr Amgylchedd (Ansawdd Aer a Seinweddau) (Cymru) | The Environment (Air Quality and Soundscapes) (Wales) Bill

Ymateb gan Sefydliad Siartredig Iechyd yr Amgylchedd | Evidence from Chartered Institute of Environmental Health (CIEH)



Environment (Air Quality and Soundscapes) (Wales) Bill Inquiry

CIEH submission to inquiry to Environment, Climate Change, and Infrastructure Senedd Committee

25th April 2023

About the Chartered Institute of Environmental Health (CIEH)

CIEH is the professional voice for environmental health representing over 7,000 members working in the public, private and third sectors, in 52 countries around the world. It ensures the highest standards of professional competence in its members, in the belief that through environmental health action people's health can be improved.

Environmental health has an important and unique contribution to make to improving public health and reducing health inequalities. CIEH campaigns to ensure that government policy addresses the needs of communities and business in achieving and maintaining improvements to health and health protection.

For more information visit www.cieh.org and follow CIEH on Twitter @The_CIEH.

Any enquiries about this response should be directed to:

Ciaran Donaghy
Senior Policy and Public Affairs Executive
Chartered Institute of Environmental Health

Key points:

- CIEH are concerned that the Bill does not expressly commit to adhering to World Health Organisation's Air Quality Guidelines.
- It is essential that the Welsh Senedd take account of all the available evidence and set ambitious PM_{2.5} targets, while adopting holistic, systems-wide regulations to ensure such targets are met.
- CIEH recommend that the Welsh Government urgently introduce ambitious air quality targets by committing to reducing the concentration of PM_{2.5} of 10µg/m³ by 2030.
- CIEH are disappointed that the Bill does not introduce greater powers to regulate domestic wood burning.
- CIEH favour the introduction of regulations on domestic wood burning in urban areas where there are on-grid heating alternatives.
- Agricultural ammonia has the potential to mix with industrial and transport emissions, which further increases the levels of PM_{2.5} in the air.
- CIEH are disappointed to see little to no reference to the need to introduce regulation on agricultural sources of emissions as part of a holistic strategy to tackle air pollution.
- CIEH feel the Welsh Senedd should introduce a Nitrogen Reduction Strategy for Wales to ensure levels of nitrogen pollution are significantly reduced.
- CIEH welcome the decision by the Welsh Senedd to put a national soundscapes strategy on a statutory footing.
- CIEH also feel that including soundscapes on the face of the Bill will do much to advance the discourse with respect to the role that soundscapes has to play in air pollution, air quality, and public health.

Introduction:

The Chartered Institute of Environmental Health (CIEH) is the professional voice for environmental health representing over 7,000 members working in the public, private and third sectors, in 52 countries around the world. Our members are often at the front line with respect to delivering regulatory services, particularly within local authorities. Environmental Health Practitioners (EHPs) work in such varied specialisms including monitoring and enforcing clean air regulations, as well as providing expert acoustics and soundscapes guidance therefore CIEH and our members are uniquely positioned to provide expert input into the recently tabled Environment (Air Quality and Soundscapes) (Wales) Bill, hereafter referred to as ‘the Bill’.

CIEH welcome the introduction of the Bill and wish to constructively engage with the Welsh Government in providing feedback. We want to ensure the Bill is both robust and fit-for-purpose with regards to improving air quality and facilitating good acoustic design that supports better public health outcomes.

CIEH hope that our evidence hereafter will be received constructively, and we welcome any and all opportunities to engage further with the Welsh Government in the process of delivering upon the intentions laid out within the Bill.

Robust and ambitious air quality targets:

Part 1, Chapter 1 (ss.1-7) of the Bill makes provision for a specific framework for setting, reviewing, and reporting on national air quality targets for Wales. However, what the Bill does not do is to expressly commit to adhering to World Health Organisation’s Air Quality Guidelines¹, choosing to ambiguously state in the explanatory memorandum to state that “Pursuant to subsection (1), before making regulations under sections 1 or 2 Welsh Ministers must: (a) seek advice from persons they consider to be independent and have relevant expertise; and (b) have regard to scientific knowledge on air pollution. This could include, for example, international evidence on the health and environmental effects of air pollution, including the World Health Organisation guidelines for air quality, and the economic, technical, and social analyses, and the feasibility of meeting targets.”

Good air quality is a basic requirement and determinant of human health. As of 2018, approximately 4.5 million children in the UK (one in three) are growing up in a town or city with unsafe levels of particulate pollution.² A legal requirement, laid out in the Environment Bill 2021, mandates the government to bring forward at least two new air quality targets in secondary legislation by 31st October 2022. While the UK Government missed this target, they did set out various environmental targets in their 25 Year Environmental Improvement Plan. Within which, the UK government introduced air quality targets for a maximum concentration of PM_{2.5} of 10µg/m³ to be met across England by 2040 and a 35% reduction in population exposure by 2040 (compared to a base year of 2018). These targets fall short of the World Health Organisation’s Air Quality Guidelines and appear

¹ [WHO global air quality guidelines: particulate matter \(PM2.5 and PM10\), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide](#)

² [Unicef UK Research Briefing - The toxic school run - September 2018.docx \(unicef.org.uk\)](#)

to ignore recent evidence that suggests such targets could be met in the UK by 2030.³ It is essential that the Welsh Senedd take account of all the available evidence and set ambitious PM_{2.5} targets, while adopting holistic, systems-wide regulations to ensure such targets are met.

Therefore, CIEH recommend that the Welsh Government urgently introduce ambitious air quality targets by committing to reducing the concentration of PM_{2.5} of 10µg/m³ by 2030, in order to protect public health.

According to UK government evidence, domestic wood burners and open fires are the second biggest source of small particle air pollution in the UK.⁴ Despite improvements in their design, academic research has found that even homes with “eco” wood burners are three times more polluted than those without.⁵ In fact, wood burners and open fires produce more harmful PM_{2.5} than road transport in the UK. The government’s own data has suggested that emissions of PM_{2.5} from domestic heating has increased by 125% in 10-years, implying a significant increase in the use of domestic wood burners.⁶

Therefore, it is very disappointing to see that the Bill does not introduce greater powers to regulate domestic wood burning. It is even more disappointing that it appears that the Welsh Government is echoing the sentiments of the Stove Industry Alliance – a lobby group with a vested interest in preventing regulation in this space - in their explanatory memorandum. In which the Welsh Government is quoted as saying “We anticipate an increase in domestic wood burning as a result of the current energy crisis. The Stove Industry Alliance has reported a UK-wide 40% increase on sales of wood burning stoves in the second quarter of 2022 (April to June) compared to the same period last year. Strengthening smoke control legislation and supporting this with advice to ensure new and current users are burning in the most efficient way will help to reduce the impact of this increase.”

The average cost to install a wood burner is £2,000.⁷ This fact dispels the Stove Industry Alliance’s contention that an increase in sales of wood burners is a direct response to the energy crisis. On the contrary, CIEH contend that domestic wood burners are middle-class status symbols that are harmful to both indoor and outdoor air quality. This includes Defra exempt, ‘ECO’-stoves, as illustrated by the Chief Medical Officer’s 2022 annual report which focused on air quality.⁸

CIEH are cognisant of the Welsh Government’s desire not to introduce policy that may have the unintended consequence of negatively impacting vulnerable households who rely on domestic wood burning stoves as their single source of heat. While greater research must be done on the specifics, the true number of households likely to be impacted in such a way are likely to be rather low in number. That is why CIEH are in favour of the introduction of regulations on domestic wood burning in urban areas where there are on-grid heating alternatives.

³ [The Pathway to Healthy Air in the UK - Clean Air Fund](#)

⁴ [Emissions of air pollutants in the UK - Summary - GOV.UK \(www.gov.uk\)](#)

⁵ [Atmosphere | Free Full-Text | Indoor Air Pollution from Residential Stoves: Examining the Flooding of Particulate Matter into Homes during Real-World Use \(mdpi.com\)](#)

⁶ [Emissions of air pollutants in the UK - Summary - GOV.UK \(www.gov.uk\)](#)

⁷ [How much does a log burner cost to install? \(Checkatrade.com\)](#)

⁸ [Chief Medical Officer’s Annual Report 2022 - Air Pollution \(www.gov.uk\)](#)

Government are passing up a golden opportunity to achieve positive outcomes in tackling air pollution and promoting better public health.

The Welsh Senedd should introduce a Nitrogen Reduction Strategy for Wales to ensure levels of nitrogen pollution are significantly reduced.

Soundscapes Strategy

Overall, the CIEH wish to state that the commitment to produce and publish a Soundscapes Strategy is to be very much welcomed. Furthermore, CIEH also feel that by including the issue of Soundscapes on the face of the Environment (Air Quality and Soundscapes) (Wales) Bill will do much to advance the discourse with respect to the role that soundscapes has to play in air pollution, air quality, and public health. This is an encouraging step from the Welsh government as it shows not only an interest but a desire and commitment to take tangible action to both improve the environment and public health.

CIEH welcome the commitment within the Bill that states that local authorities can use existing soundscape strategies, as considerable time and resource would have been spent on producing them to date.

Finally, CIEH believe that it is important we are considered a key stakeholder in the process of preparing and reviewing the National Soundscapes Strategy. Since this is a public health matter, that will require the expertise, enforcement and monitoring of local authority environmental health officers, CIEH members will be intimately involved in reviewing and updating local authority strategic noise maps, which in turn will support reviewal and drafting strategies for the National Soundscape Strategy. As such, under s.22(6)(b), CIEH wish to be acknowledged on the face of the Bill as a key stakeholder to be consulted by the Welsh government when preparing and reviewing the soundscape strategy.



Llywodraeth Cymru
Welsh Government

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9 Mai 2023

Annwyl Huw,

Y Cytundeb Cysylltiadau Rhyngsefydliadol: y Pwyllgor Sefydlog Rhyngweinidogol ar Drafnidiaeth

Rwy'n ysgrifennu yn unol â'r cytundeb cysylltiadau rhyngsefydliadol i roi gwybod ichi am gyfarfod agoriadol y Pwyllgor Sefydlog Rhyngweinidogol ar Drafnidiaeth, a fydd yn cael ei gynnal ar 24 Mai.

Fi fydd yn cadeirio'r cyfarfod rhithiol hwn lle rwy'n rhagweld y bydd y drafodaeth yn canolbwyntio ar deithio llesol ac ar rannu data.

Byddaf yn rhoi diweddariad ichi ar ôl y cyfarfod.

Rwyf hefyd yn anfon copi o'r llythyr hwn at Mick Antoniw AS, y Cwnsler Cyffredinol a Gweinidog y Cyfansoddiad; y Gwir Anrhydeddus Elin Jones AS, y Llywydd; y Pwyllgor Newid Hinsawdd, yr Amgylchedd, a Seilwaith.

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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Lee Waters AS/MS
Y Dirprwy Weinidog Newid Hinsawdd
Deputy Minister for Climate Change

Eitem 7

Yn rhinwedd paragraff(au) vi o Reol Sefydlog 17.42

Mae cyfyngiadau ar y ddogfen hon