

## AQS 02 Asthma and Lung UK

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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 Asthma and Lung UK | Evidence from Asthma and Lung UK

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### 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?

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Asthma + Lung UK Cymru At some point in our lives, one in five of us will have a lung disease. Across the UK, millions more are at risk. Asthma + Lung UK Cymru are the only UK charity looking after the lungs of Wales, and in this manifesto we aim to bring the needs of people with lung conditions to the forefront of policy-making.

As we've seen with the COVID-19 crisis, acute respiratory symptoms can bring countries to a standstill and cause thousands of deaths. The recent pandemic has highlighted the need for clear and robust guidelines and support for people with a lung condition, but has also shone a spotlight on the patchy provision of support and treatment for everyone who has a respiratory disease.

Through research, we can find new ways to prevent, manage (and self-manage), treat and eventually cure lung diseases.

With support, we provide for people who struggle to breathe the skills, knowledge and confidence to take control of their lives.

Together, we're campaigning for clean air, better services and investment in research and innovation.

One day, everyone will breathe clean air with healthy lungs. Only through action and commitment to change can we make that happen.

General principles

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Thank you for the opportunity to respond to the Environment (Air Quality and Soundscapes) Bill consultation. We welcome the need for clean air legislation and have been calling for a 'Clean Air Act since 2017 alongside Healthy Air Cymru partners.

There is no safe level of air pollution. An air pollutant is any substance in the air that could harm people. Particulate matter, known as PM, and nitrogen dioxide are particularly damaging. We also know that deprived communities are often in areas with higher levels of air pollution, contributing to health inequalities.

When people are exposed to high pollution levels, for example on a busy road or during a high pollution episode, they breathe in these toxic materials into their lungs. As well as longer term impacts, many people initially experience immediate symptoms such as irritated airways, feeling out of breath and coughing.

Poor air quality has been linked to several conditions, with growing emerging evidence that highlights the high levels of air pollution impacting every level of society by increasing the chances of lung cancer, childhood asthma, COPD, miscarriage, premature birth/low birth weight, heart disease, dementia, mental health, obesity and, many other conditions.

Air pollution is the biggest environmental threat to public health, second only to smoking. At a cost £1bn per year to our NHS, air pollution is draining our resources, straining our health system and cutting short almost 2000 lives a year in Wales. It is a public health crisis.

Air pollution also has a damaging impact on nature, and emissions from pollutants also contribute to climate change, worsening the climate and nature emergency that we urgently face.

The Welsh Government has stated that the Environment Bill will address all these areas, but regulations and implementation will be key. We support the principles of the Bill.

## **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)

In sections 1-7 the Bill provides Welsh Ministers with new powers to set, review and monitor targets for different pollutants. Section 1 gives Ministers wide scope

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to set targets on any pollutant at any time in the future through regulations, whilst section 2 gives a specific requirement to set target(s) on PM2.5.

### The health and environmental impact of different pollutants

In the 2020 Clean Air Plan - Healthy Air, Healthy Wales the Welsh Government committed to focussing on a wide range of pollutants, including nitrogen dioxide (NO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM<sub>2.5</sub>/PM<sub>10</sub>), ozone (O<sub>3</sub>), sulphur dioxide (SO<sub>2</sub>) and benzo[a]pyrene (B[a]P). These were all highlighted as priorities where action would be needed to reduce levels. The World Health Organisation have published new guidelines for not only particulate matter, but NO<sub>2</sub> and O<sub>3</sub> as well.

### Particulate matter

Particulate matter consists of fine particles that, once in the air, are harmful to human health. They can be classified as either particles with a diameter of less than 10 micrometers (PM<sub>10</sub>) or even smaller, as PM<sub>2.5</sub> (particles with a diameter of less than 2.5 micrometers). PM<sub>2.5</sub> is more harmful as it can penetrate deeper into the lungs and enter the bloodstream, causing blood vessel walls to narrow and harden over time, increasing blood pressure and strain to your heart, even causing blood clotting. Particulate matter can cause more long term damage to the health of people with existing heart and lung conditions, elderly people, pregnant women and their unborn children, and the very young. The majority of air pollution early deaths are linked to particulate matter pollution. Emissions of black soot from incomplete combustion are associated with effects on climate change.

The top sources of PM<sub>2.5</sub> are domestic wood and coal burning (38%), industrial combustion (16%), road transport (exhaust emissions and tyre/brake wear) (12%) and use of solvents and industrial processes (13%). Particulate matter can come from natural sources such as wind-blown dust, sea salt, pollen and soil particles. It can travel long distances meaning that pollution from England and even parts of northern Europe can impact on levels in Wales.

Ammonia emissions from agriculture can react with other pollutants to form particulate matter. A recent study also found that agricultural emissions are responsible for more than a quarter of particle pollution in UK cities (Diagnosing domestic and transboundary sources of fine particulate matter (PM<sub>2.5</sub>) in UK cities using GEOS-Chem - ScienceDirect). The study found that particle pollution from the rest of Europe also affected the UK, especially the south and east of England, but less so than the impact from UK farming. UK agriculture was

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responsible for 38% of particle pollution in Leicester, 32% in Birmingham and 25% in London in 2019, according to the study. In each case, the contribution from rural agriculture was greater than all the sources within the cities themselves.

WHO states that there is no threshold below which PM<sub>2.5</sub> does not damage health (WHO Guidelines for Indoor Air Quality. World Health Organisation. 2014. <https://rb.gy/8t50xc>). At present the law on PM<sub>2.5</sub> pollution in Wales says annual average concentrations cannot exceed 25µg/ m<sup>3</sup> (micrograms per cubic metre of air), an incredibly high level of air pollution that thankfully hasn't been exceeded. Pre-2021 the WHO guideline was 10 µg/ m<sup>3</sup>, and analysing 2019 air pollution data, Asthma + Lung UK Cymru was able to estimate that 1.9% care homes, 0.9% hospitals, 3.3% GPs and 1% schools were in areas above the limit. However, the new 2021 WHO guidelines have reduced the recommended PM<sub>2.5</sub> limit to 5 µg/m due to dangers of these pollutants. Analysing the 2019 data again 100% of Welsh care homes, hospitals, GPs and schools are in areas where the levels are currently too high.

Reducing the particulate matter pollution levels will save lives. The 2023 joint report by British Heart Foundation Northern Ireland and the Irish Heart Foundation (<https://www.bhf.org.uk/-/media/files/what-we-do/in-your-area-northern-ireland-pages/air-pollution-and-mortality-on-the-island-of-ireland-report.pdf?rev=7f884a2856784374928acb956f2706b9&hash=B6714D212095722B95909C93C2E03279>) estimated approximately 950 lives could be saved each year across the island of Ireland if PM<sub>2.5</sub> levels were reduced to 5.0 µg/m<sup>3</sup> – 382 in Northern Ireland and 564 in the Republic of Ireland. Air pollution levels are higher in Wales so a similar study if commissioned here would likely show even more deaths prevented.

## Nitrogen oxides

Nitrogen oxides comprises nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>), and as a group of pollutants they have significant impact on health and the environment. The top sources of NO<sub>2</sub> are road transport (34%), energy generation (22%), domestic and industrial combustion (19%) and other transport (17%).

Nitrogen dioxide causes inflammation of the airways, increased susceptibility to respiratory infections and to allergens. If someone already has a respiratory condition such as asthma and COPD, short term exposure could lead to exacerbations of the condition and hospitalisation. Long term exposure can cause certain respiratory conditions including asthma, and is associated with mortality and morbidity. NO<sub>2</sub> and NO<sub>x</sub> impact on the environment by damaging crops and contributing to climate change.

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At present the law on nitrogen dioxide (NO<sub>2</sub>) pollution in Wales says annual average concentrations cannot exceed 40 µg/m<sup>3</sup> (micrograms per cubic metre of air). In 2017 Welsh Government was taken to court by Client Earth due to these limits being exceeded in Cardiff, Caerphilly (Hafod Yr Ynys) and trunk roads. Action was taken to restrict vehicle access, demolish homes and reduce speeds to reduce these levels. The most recent DEFRA compliance assessment (on air in 2021) shows the South Wales Zone still failing to meet the NO<sub>2</sub> annual limit value ([https://uk-air.defra.gov.uk/library/annualreport/assets/documents/annualreport/air\\_pollution\\_uk\\_2021\\_Compliance\\_Assessment\\_Summary\\_Issue1.pdf](https://uk-air.defra.gov.uk/library/annualreport/assets/documents/annualreport/air_pollution_uk_2021_Compliance_Assessment_Summary_Issue1.pdf)), when this was meant to be met by 2010, or 2015 at the latest. Analysing 2019 air pollution data, Asthma + Lung UK Cymru was able to estimate NO<sub>2</sub> and PM<sub>2.5</sub> levels around care homes, libraries, sports grounds, hospitals, GPs and schools. The data showed that at least according to modelled data, none of these locations were in areas where NO<sub>2</sub> levels were exceeded.

In September 2021, the World Health Organization (WHO) published new Air Quality Guidelines (AQGs) reducing the recommended maximum annual average for NO<sub>2</sub> pollution to 10 µg/ m<sup>3</sup>, down from 40ug/ m<sup>3</sup>. Meeting this level will be challenging with an estimated 21.7% of care homes, 22% of libraries, 18.9% of sports grounds, 26.1% of hospitals, 34.9% of GPs and 21.8% of schools being in areas of unsafe levels according to 2019 modelled data analysed by Asthma + Lung UK Cymru.

Given the new WHO guidelines on NO<sub>2</sub>, much reduced on health grounds, the Bill must also specify that new NO<sub>2</sub> targets must be set. This could for instance be as a section between 2 and 3. It should be noted that at the time the UK Environment Bill was being developed the WHO had not yet produced their updated AQGs.

## Ozone

Ozone is produced by the effect of sunlight on NO<sub>x</sub> and hydrocarbons (from combustion). High up in the stratosphere ozone keeps Wales safe from the radiation, but at ground level it can negatively impact on human health and the environment. O<sub>3</sub> can travel long

distances and reach high concentrations far away from the original source of the original pollutants.

High ozone levels can be dangerous for people with existing respiratory conditions, worsening asthma symptoms and causing chest problems

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potentially resulting in hospitalisation. It negatively impacts the environment, affecting the growth of plants and reducing crop yields.

The target value for O<sub>3</sub> is 120 µg/m<sup>3</sup> as an 8-hour mean, not to be exceeded more than 25 times per year averaged over 3 years. In 2020 there were less than 10 exceedances ([https://airquality.gov.wales/sites/default/files/documents/2022-10/AQ-Wales-2021\\_English\\_Final.pdf](https://airquality.gov.wales/sites/default/files/documents/2022-10/AQ-Wales-2021_English_Final.pdf)).

In September 2021, the World Health Organization (WHO) published new Air Quality Guidelines (AQGs) the recommended 8 hour mean concentration (with 3-4 exceedances per year) to 100 µg/m<sup>3</sup>. They also proposed a 'Peak season' target of 60 µg/m<sup>3</sup> defining this long term target as the 'Average of daily maximum 8-hour mean O<sub>3</sub> concentration in the six consecutive months with the highest six-month running-average O<sub>3</sub>.' Both these new targets are needed to protect human health, but will be challenging to meet.

#### Legislating for new targets

The explanatory memorandum at Point 3.13 says “ Our Programme for Government for 2021 to 2026 reiterated our commitment to introduce a Clean Air Act for Wales, consistent with World Health Organisation (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.” and the EM states (eg Point 14, Annex 1): ‘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.’ We welcome the commitment in the Bill to seek relevant advice and to have regard to scientific knowledge, and the references to the new WHO guidelines in the EM, but worry that there is nothing in the Bill to ensure that targets will be set to be consistent with WHO guidance, as committed to. In theory there would be nothing to prevent a Minister from choosing a much less rigorous target. It must be made clear in the Bill itself that the up to date WHO guidelines need to be the foundation of the target setting process, and that targets must be consistent with them - and must be met in the shortest time possible. We would like to see this captured on the face of the Bill, potentially listed in section 3, 5, 6 or become its own section..

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We are disappointed that s1(1) states that Ministers 'may set long-terms targets', whilst s2(1) states that they 'must'. We would like the Bill to capture in law the Welsh

Government commitment to legislate to deliver the World Health Organization limits on air pollution and give citizens the 'right to breathe clean air.'

New air pollution targets need to be set for all pollutants included in the 2021 guidelines, so we would like to see all the pollutants covered by section 1 required to have a new targets, so s1(1) would need to become 'must' rather than 'may'

We welcome the inclusion of section 5 and a reporting process that allows for Senedd scrutiny, but we are concerned about the time it would take for action to be taken. The targets will be set with regulations described in sections 1 and 2, but these targets may be for future dates rather than now. Delivering WHO limits on NO2 and PM2.5 will take many years, so the targets set by Ministers might be for 2035 or 2040, potentially with some interim targets in the years preceding this. Therefore the timeline described in section 5 wouldn't start until many years into the future. We would therefore like to see s.5(2) amended to require Ministers to report on progress on air pollution targets annually rather than simply the 'reporting date.'

Some targets might be set immediately, but even with those we are concerned about the speed of reporting. s.5(4) states 'Where the Welsh Ministers make a statement that a target has not been met, the Welsh Ministers must, before the end of 12 months beginning with the date on which the statement is laid, lay before the Senedd, and publish, a report.'

With almost 2,000 lives cut short every year due to air pollution, we worry that 12 months to publish a report setting out what the Welsh Government will do to correct air pollution exceedance is too long. We would like to see this reduced to 6 months, if not further.

Finally It is unclear at what an individual, institution or organisation would be able to seek legal redress if the legal limits continued to be exceeded. Through membership of the EU, citizens previously had this right through the EU Ambient Air Quality Directive 2008/50/EC. s.5(5)(b) states that a report must set out the steps the Welsh Ministers have taken, or intend to take, to ensure the specified standard is achieved as soon as reasonably practicable.' We are concerned this wording is unclear and would like the Bill to set a timescale, for example 'within 6 months.'

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## Promoting awareness about air pollution (section 8)

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Welsh Government should run targeted informational campaigns on the environmental and health impacts of air pollution and burning, as well as providing advice and support to suppliers and households on how to reduce the moisture content of wood.

In promoting awareness about air pollution, Welsh Government should also commit to promoting awareness of behaviour-change solutions that can reduce air pollution. Just as public bodies will be required to have due regard for the impact on air quality, raising

awareness of air pollution should be linked to promotion of healthy behaviours to improve our air quality such as active travel and the need for modal shift.

Research (Physical Activity through Sustainable Transport Approaches, 2019) has shown that social factors impact on behaviours. Those who valued low air pollution exposure and low environmental impacts, amongst others values, tended to walk more; “this suggests that if people could see the importance of these values, they may be encouraged to walk more” (Imperial College London News, 19 September 2019)

The current Net Zero Plan to reduce passenger miles by 10% and increase the modal share for active travel and public transport to 39% by 2030 are ambitious. However, regulatory tools within this legislation combined with a whole-system approach to promoting awareness on air pollution and modal shift will go some way towards meeting our existing Net Zero targets.

## National air quality strategy (sections 9 to 11)

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We worked with Welsh Government to develop the 2020 Clean Air Plan - ‘Healthy Air, Healthy Wales’ - and have called for the successor documents to be statutory strategies with the added importance and status that this would bring.

Sections 9 to 11 are therefore welcomed in principle but we are concerned about the way that the Bill attempts to achieve this.

The Bill attempts to amend the Environment Act 1995 (section 80) in order to state that the powers to make a ‘national air quality strategy’ in Wales would now rest with Welsh Ministers at the Senedd, rather than a Secretary of State and the UK Parliament. This provision was made possible by the UK Environment Act 2021 amending the same section to specify that the UK Government would use this power to make a nation air quality strategy.

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This seems a very unusual way to draft a Bill and we are concerned about unforeseen consequences. We would therefore like to see this section redrafted so that it is clear that the Environment (Air Quality and Soundscape) Bill is granting Welsh Ministers clear powers to develop a Clean Air strategy with a clear review process defined in the Bill. Section 22 provides a useful template that a revised Section 9 could follow.

If Section 9 was rewritten this would require changes to Section 10 and 11 also. Whether the wording stays in the amended Environment Act 1995 or preferably moves to this Bill, we are concerned that s.11(1) is not strong enough. It states 'the following persons must have regard to the policies...' We worry that the strategy could be ignored by public

authorities if it is only 'have regard to.' We would propose 'must reflect the policies' or something similar

#### Air quality regulations (section 12)

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We don't have any specific comments on this section.

#### Local air quality management (sections 13 to 15)

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The current process of monitoring national and local air pollution is inadequate, creates confusion for the public and gives a false picture of the air pollution challenges that Wales faces. The existence of two different monitoring systems - one based on a small number of monitors for previous EU directive purposes and local monitoring based largely on diffusion tubes is unhelpful. When the Welsh Government faced legal action for NO<sub>2</sub> exceedances this was due to national monitoring. Welsh Government has taken action to reduce these, but there are other areas with exceedances where monitoring is not taking place.

Welsh Government recognise in the explanatory memorandum, (EM 3.127) that the current system is not working so section 14 is designed to tackle these issues. We welcome the need for local authorities to require an annual review of local air quality, and to need to commit to a compliance date agreed with Welsh Government. As EM 3.133 states the current framework only requires local authorities to develop actions 'in pursuit' of compliance. This could lead to the same air quality management areas remaining for years.

What is unclear from the Bill and the explanatory memorandum is how the local authority reporting cycle aligns with Welsh Government's reporting cycle to the Senedd. If a national monitoring network is established and is reporting data to

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both Welsh Government and to local authorities, should section 13(3) still be a local authority requirement or should the duty lie with Welsh Government?

Section 5(4) requires the Welsh Government to make a statement within 12 months of a target not being met. Would Section 14 need to be aligned with section 5 to ensure that Welsh Ministers had this information before they make their statement to the Senedd?

Finally, the current local air quality management is struggling based on the current air pollution exceedances. As the targets are reduced to meet the World Health Organization limits, there will be a lot more exceedances in both NO<sub>2</sub> and PM<sub>2.5</sub>.

### Smoke control (sections 16 to 18)

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We welcome the inclusion of the 3 smoke control sections (s16-18), but we are concerned that they don't go far enough.

#### The challenge of domestic burning

Domestic burning is the burning of solid fuels in the household for purposes such as cooking, heating, or lighting, for example log burners or bonfires.

National Atmospheric Emissions Inventory states that domestic burning of solid fuels is the largest single contributing source of the UK's levels of PM<sub>2.5</sub>, producing as much as transport and industry combined (NAEI, <https://naei.beis.gov.uk/>)

Despite improvements in their design, academic research has found that even homes with "eco" wood burners are three times more polluted than those without ([Atmosphere | Free Full-Text | Indoor Air Pollution from Residential Stoves: Examining the Flooding of Particulate Matter into Homes during Real-World Use \(mdpi.com\)](#)). In fact, wood burners and open fires produce more harmful PM<sub>2.5</sub> than road transport in the UK. The government's own data has suggested that emissions of PM<sub>2.5</sub> from domestic heating has increased by 125% in 10-years, implying a significant increase in the use of domestic wood burners ([Emissions of air pollutants in the UK - Summary - GOV.UK \(www.gov.uk\)](#)).

Often, domestic burning is for aesthetic purposes and only 1% of Welsh households rely on burning solid fuels as their primary source of heating (Welsh Housing Conditions Survey, Welsh Government, <https://www.gov.wales/welsh-housing-conditions-survey>).

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Wood which hasn't been dried out and traditional bituminous coal are some of the most polluting fuels. Less harmful alternatives include dried wood and authorised biomass fuels manufactured into briquettes (Reducing Emissions from Domestic Burning of Solid Fuels, Welsh Government. <https://rb.gy/c7u40i>).

What action would we like to see?

Not all the actions needed require primary legislation, with Welsh Government already having powers, and some of it being down to behaviour change.

- **Better fuel:** A ban on sales of wet wood and suppliers should also be legally required to maintain wood at a moisture content of 20% or less, this should be regulated with an administered certification scheme to carry out robust testing and auditing. There should also be a ban on the sale of traditional bituminous coal, and a move to greener more cost-effective alternatives.
- **Better appliances:** Welsh Government should commit to regulation which ensures only the most efficient stoves are available to buy and are fitted and maintained regularly by a competent professional.
- **Better information:** Welsh Government should run targeted informational campaigns on the environmental and health impacts of burning, as well as providing advice and support to suppliers and households on how to reduce the moisture content of wood.
- **Moving away from domestic burning:** To ensure a reduction of emissions from domestic burning there should be long term ambitions to move away from domestic burning altogether. Any policies must be accompanied by support for households to move to safer, cleaner alternatives to domestic burning.

What changes will the Bill make?

In EM 3.153 Welsh Government states that it is their objective to 'improve the use and implementation of smoke control legislation to reduce air pollution for the benefit of current and future generations.' We support this objective and agree that these sections will make a positive impact. The change from a criminal to a civil offence is a positive one and we agree that it will help local authorities to enforce the current rules.

However we are unclear whether the Welsh Government do want to expand smoke control areas and protect public health or not. At present there are only 4 local authorities operating smoke control areas and neither the Explanatory Memorandum or the Bill makes it clear whether the Welsh Government would

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encourage local authorities to apply for them. In theory new, lower air pollution targets might require local authorities to introduce smoke control areas in order to meet the targets, but the Bill as drafted doesn't appear to give Ministers the power to roll them out Wales-wide. As stated earlier domestic burning is a huge public health issue, in particular for people living close by. It would be possible to have a localised PM2.5 spike on a road, street or even a village that wouldn't be picked up by modelled air pollution, only if a monitor was nearby. If air pollution levels elsewhere in the city or county were not poor, then a smoke control area might not be considered.

We would like the Bill to roll out smoke control restrictions across the whole nation, giving everyone the protection they need from the dangers of burning the most polluting fuels. Regulations could provide for a system of exemptions for people who live in very remote areas, but domestic burning in the rest of Wales should be minimised and only using dry/smokeless fuels.

We are concerned that section 16 and schedule 1 appear to largely duplicate the existing legislation for England in the Clean Air Act 1993 rather than develop something bespoke for Wales. We would like those powers to be transferred into this Environment Bill to create a new legal landscape around clean air in Wales instead.

#### Vehicle emissions (sections 19 to 21)

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Vehicle emissions, particularly from private cars, are one of the greatest contributors to air pollution. As a result, there is an inevitable link between the number of vehicles on our roads and the quality of our air. The number of people choosing to travel actively will be important in tackling air pollution and reducing vehicle emissions. Existing targets in the Net Zero Plan to reduce emissions by 22% between 2019 and 2025, and by 98% by 2040, and highlights the need for this legislation to utilise all tools at Welsh Government's disposal including the introduction of clean air zones under existing powers in addition to exercising trunk road charging that would be introduced in this bill.

#### Trunk Road charging

Sections 19 and 20 give Welsh Ministers power to introduce vehicle charging on trunk roads where air pollution continues to exceed. The Bill doesn't cover clean air zones or towns and cities due to the Senedd not having legislative competence in this area. Welsh Ministers already have power to introduce clean air zones due to the UK Transport Act 2000.

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Vehicle charging through Clean Air Zones has been used to reduce air pollution in cities across Europe and in England. London has the most successful one (<https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/environment-and-climate-change-publications/inner-london-ultra-low-emission-zone-expansion-one-year-report>) with benefits including:

- An almost 50 percent reduction in toxic Nitrogen Dioxide (NO<sub>x</sub>) pollution in central London
- Pollution has decreased five times faster in London than anywhere else in the UK (between 2016 and 2020)
- One million hospitalisations averted in total by 2050
- 94 percent of vehicles seen driving in the current zone now meet the strict emissions standards on an average day, significantly higher than the 39 percent in 2017 when the ULEZ was first announced.

In 2018 Welsh Government introduced 50mph restrictions on 5 trunk road locations. In all but one location, air pollution limits have been reduced below the current NO<sub>2</sub> legal limits. However if air pollution limits are reduced in the short term, more radical action will be needed.

Welsh Government are seeking powers to introduce vehicle charging on trunk roads to help reduce air pollution further. We support Clean Air Zones and vehicle charging, but we are unsure whether charging on trunk roads will have the desired impact. A city centre Clean Air Zone works on the basis that people can substitute cars for public or active travel to get into the centre. A trunk road clean air zone might not work as well with the risk that traffic and air pollution are diverted onto smaller, residential roads rather than on public transport.

### Vehicle idling

We strongly welcome s.21 amendments to the Environment Act to make stationary idling an offence under the s.42 of the Road Traffic Act 1988. Every minute, an idling car produces enough exhaust emissions to fill 150 balloons with harmful chemicals, including cyanide, NO<sub>x</sub> and PM<sub>2.5</sub>.

A 2016 study found that one factor in people choosing to make journeys on foot was environmental aesthetics, including air quality and fresh air (Dadpour et al. 2016, Int J Environ Res Public Health: 731). With cleaner air we can encourage people to travel actively and promote the benefits of outside physical activity.

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However, we would welcome clarity on how the Welsh Government expects penalties for stationary idling to be issued, and which bodies will be tasked with the enforcement of the offence.

### National soundscapes strategy (sections 22 and 23)

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We welcome the commitment to produce and publish a Soundscapes Strategy. We were initially surprised to see noise and sound added to what would have been a Clean Air Bill, but can now see the benefits to advance the discourse with respect to the role that soundscapes have 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.

We 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.

We have several questions regarding the proposed actions time frames. While it is reasonable to review the strategy every five years, the Bill provides scant detail as to what actions will be firmly taken during this review period. While the Bill mentions in s.22(6)(a)(i) that Ministers must 'have regard to scientific knowledge relating to soundscapes', it is unclear what actions will be taken by Ministers to ensure that the most appropriate scientific knowledge will be sought.

S.22(6)(a)(ii) of the Bill refers to Minister having regard to 'recent strategic noise maps.' We wish to highlight that under s.7(2) Environmental Noise (Wales) Regulations 2006 strategic noise maps need to be reviewed every five years. In local authorities where strategic noise maps have not been reviewed within the previous 12 – 24 months, they are unlikely to have considered lifestyle changes that have occurred over the past three years owing to the COVID-19 pandemic. Over the previous three years, more people are working from home, there are more mixed-use developments and conversions, while more and more people are relying on home deliveries etc. All these changes will have made a considerable impact on strategic noise maps, with more recent consideration to be afforded to noise impacts on public health.

We are also somewhat concerned about the proposed review period. S.22(5)(a) indicates that the Bill is to reviewed 'within 5 years of the publication of the strategy and (b) within each period of 5 years beginning with the day on which the Welsh Ministers completed their most recent review under this subsection.'

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We believe such a review period to be reasonable. However, there is a lack of in the explanatory memorandum, on several items

such as how the impacts on soundscapes are to be measured throughout the five-year period, who will be responsible for monitoring this data, how local monitoring could be coordinated nationally, and who will be responsible for leading the soundscapes strategy review. Furthermore, s.22(7) enables the Minister to alter the review period outlined in (5) to enable the Minister to potentially prolong the period in which a review must be concluded. We are concerned that such a clause would enable the review period to be extended beyond the 5 years. We would like such a review period to be set at 5 years maximum and that should the Minister wish to review the soundscapes strategy sooner, s.22(5) enables the Minister to do so. Therefore, we wish to question the decision to include (7) if not for the sole purpose of enabling the Minister to prolong the review period and wish to argue that s.22(7) be removed from the Bill.

While s.24 enables Ministers to change the intervals at which strategic noise maps must be made and adopted under regulation 7(2) of the Environmental Noise (Wales) Regulations 2006 and to change the period within which reviews of noise action plans under regulation 17(3)(b) of those Regulations must take place, para 105 provides no further information as to under what circumstances this would take place. We wish to question the decision to include s.24 if not for the sole purpose of enabling the Minister to prolong the review period by which strategic noise maps are to be reviewed and wish to argue that s.22(7) be removed from the Bill.

S.23 (1) of the Bill, and expanded in para 101 in the explanatory memorandum, highlights that local authorities and relevant Welsh public authorities are required to 'have regard to the policies in the national strategy on soundscapes published under section 22 when exercising any function of a public nature that could affect soundscapes in Wales.' We are concerned that this requirement does not go far enough as 'having regard' does not impose a mandatory requirement for the local authority or relevant Welsh public authority to abide by the policies in the national strategy on soundscapes when exercising their duties. Amidst competing, and often conflicting priorities, local authorities could consider, but ultimately dismiss, the policies in the national soundscapes strategy in exercising their duties. We are in favour of strengthening this aspect of the Bill to include 'having due regard

Strategic noise map and noise action plans (sections 24)

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Nothing further to add to the above.

General provisions (sections 25 to 28);

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Nothing to add to this section

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

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As mentioned in previous sections there are some areas where it could be clearer what was a Welsh Government vs local authority responsibility.

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)?

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In many ways the Bill gives too wide ranging powers, but there are sections where these powers don't go far enough. Sections 1 and 2 for examples give powers to set targets but Ministers are not constrained by how ambitious or how urgent these targets are in improving air quality. As stated earlier, we would like to see the World Health Organization limits recognise somewhere within the legislation itself rather than just referenced in the appendix. However there are other areas where ministerial powers are constrained. On smoke control areas, the power to establish one seems to remain with the local authority, whilst S.19(1)(b) places constraints on when Ministers would be able to introduce trunk road charging.

Are any unintended consequences likely to arise from the Bill?

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If the Bill does not go far enough there is the consequence that it will take many years to find legislative time to pass another Environment Bill.

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?

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Welsh Government has set out a detailed breakdown of the estimated costs of the Bill in pages 79-156 in the Explanatory Memorandum. The calculations would have been done with a clear methodology, and we support the investments in monitoring, consultancy support, awareness campaigns and governance, but there are some areas where the amounts proposed seem far too low.

LAQM

The EM proposes a budget of £1 million per year to provide a revenue/capital allocation to assist councils in meeting the new targets locally. This seems very

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small if it is truly going to make a difference locally. In 2019 Welsh Government allocated a fund of £20 million to tackle air pollution mostly directed at Cardiff and Caerphilly councils. The cost of road and traffic changes and the compulsory purchasing of houses were huge and this fund also helped with better monitoring and purchasing electric buses. £1 million for all of Wales would make very little difference, so doesn't seem very realistic.

#### Smoke control areas

The total budget proposed for this is set out in Table 9 and varies from £15.8k to £18.4k. There is a missing row where it states 'local authority costs to follow guidance', but the row marked 'local authority costs to enforce new regime' is only £18.4k. If domestic burning is to be tackled locally and then this will require a dramatically increased enforcement provision with staff operating day and night to investigate complaints of wet wood or burning, and technology to identify the sources. This could potentially cost millions of pounds every year.

#### Trunk roads

The EM only includes a one off cost of £30k for the Trunk road powers in 2024/25. This might be the cost of the civil service time to develop the guidance, but it seems disingenuous to say that Road User Charging will be completely revenue neutral. In the long term this might be the case, but the preparation and introduction years would be expensive with the costs only recovered later.

#### Statutory idling

The EM proposes a budget of only £16.4k for 2024/25 with no further costs. There is a missing row where it states 'local authority costs to follow guidance.' Similar to smoke control areas, this is an area where most councils would need to employ new staff so these costs will be large. Table 11 states that 'a level of support will be available from the LAQM Support Fund', but as stated earlier, we worry this fund is far too small.

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

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N/A

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