AQS36 Sustrans 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 Sustrans Cymru | Evidence from Sustrans 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?

Sustrans Cymru supports the general principles of the Bill and the need to legislate.

Everyone in Wales has the same right to breathe clean, healthy air. Breathing in polluted air is known to increase the likelihood for individuals to develop health concerns, and to reduce life expectancy. There is also consensus that the more metrically deprived you are, the more likely you are to live in an area with poor air quality. Breathing in polluted air is a significant issue of public health and social justice that we cannot afford to ignore.

One of the main causes of air pollution, particularly within our cities, is transport. Sustrans shares the Welsh Government's policy objective of the need to achieve Net Zero. The role of transport, as well as its impact on people and places is pivotal. Transport produced 27% of the UK's total emissions in 2019. Of this, the majority (91%) came from road transport vehicles. This needs to be addressed urgently.

We need to have a plan in place not just to reduce pollution caused by the transport sector, but also to create a fairer society by making affordable active travel options accessible to everyone. We know that by doing this, we can improve health and wellbeing, increase social connection and improve the environment.

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and have submitted a comprehensive joint response. This individual response supplements that by adding evidence relating to our primary area of interest which is Transport.

- 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)

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and support our joint response to this part of the consultation, as follows:

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 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 (NO2), nitrogen oxides (NOx), particulate matter (PM2.5/PM10), ozone (03), sulphur dioxide (SO2) and benzo[a]pyrene (B[a]P). These were all highlighted as priorities where action would be needed to reduce levels. The World Health Organization have published new guidelines for not only particulate matter, but NO2 and O3 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 micrometres (PM10) or even smaller, as PM2.5 (particles with a diameter of less than 2.5 micrometers). PM2.5 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 PM2.5 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.

WHO states that there is no threshold below which PM2.5 does not damage health (WHO Guidelines for Indoor Air Quality. World Health Organization. 2014. https://rb.gy/8t50xc). At present the law on PM2.5 pollution in Wales says annual average concentrations cannot exceed 25µg/m3 (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/m3, 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 PM2.5 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=B6714D212095722B95909C93 C2E03279) estimated approximately 950 lives could be saved each year across the island of Ireland if PM2.5 levels were reduced to 5.0 µg/m3 – 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 (NO2), and as a group of pollutants they have significant impact on health and the environment. The top sources of NO2 are road transport (34%), energy generation (22%) 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.

At present, the law on nitrogen dioxide (NO2) pollution in Wales says annual average concentrations cannot exceed 40 µg/m3 (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 NO2 annual limit value (https://uk-

air.defra.gov.uk/library/annualreport/assets/documents/annualreport/air_pollution_uk_202 1_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 NO2 and PM2.5 levels around care homes, libraries, sports grounds, hospitals, GPs and schools.

In September 2021, the World Health Organization (WHO) published new Air Quality Guidelines (AQGs) reducing the recommended maximum annual average for NO2 pollution to $10\,\mu g/m$, down from 40ug/m3. 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 NO2, much reduced on health grounds, the Bill must also specify that new NO2 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.

Legislating for new targets

In the explanatory memorandum (EM 3.13) it states: "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." and EM 14 states: '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 Organization 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.

We are disappointed that S.1(1) states that Ministers 'may set long-terms targets', whilst S.2(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 new targets, so \$.1(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 \$.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.'

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

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and support our joint response to this part of the consultation, as follows:

Welsh Government should run targeted informational campaigns on the environmental and health impacts of air pollution.

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.

We would welcome powers for Ministers to develop a clean air strategy with the commitment to an air quality strategy with a clear review process. We do think, however, that the current wording presents a risk that the strategy will be ignored by public bodies where it states they 'must have regard to the policies'. We would prefer stronger wording to ensure public bodies commit to the bold action required to ensure clean air.

2.iv) Air quality ulations (section 12)

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

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

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and support our joint response to this part of the consultation, as follows:

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 NO2 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 both Welsh Government and to local authorities, should \$.13(3) still be a local authority requirement or should the duty lie with Welsh Government?

S.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 NO2 and PM2.5.

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

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

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

Trunk Road Charging

We support the Bill's intention to enable Welsh Ministers to establish trunk road charging schemes. Firstly, we support this ability, as set out in the Bill, for the specific purpose of reducing or limiting air pollution in the vicinity of the trunk road to which the scheme will apply. Secondly, we also support this ability to establish trunk road charging schemes, as set out in the Bill, for any other reason.

Car-dominated spaces create congestion and damage our environment and health. Damage is caused by air pollution, but also by other factors including poor road safety; the severance of communities by busy highways, the damage to the economy caused by congestion; noise pollution; and public health concerns caused by low levels of physical activity. Because damage is more extensive than air pollution alone, it is justifiable to establish trunk road charging schemes for reasons other than limiting air pollution.

Trunk road charging schemes could be a positive step towards creating more equitable, healthy, and liveable places. We see the potential to reduce congestion and promote sustainable, active travel, while also establishing new funding to invest in public transport and active travel. This could provide a real alternative to driving for many people, making it easier and more affordable to choose sustainable modes of transport.

Any charging scheme must be designed with equity in mind. We know that the impacts of air pollution and traffic congestion are often felt most acutely by low-income communities and disabled people. By ensuring that charging schemes are equitable, in the way payments are collected and in the types of interventions and areas where funding is reinvested, we can work towards creating a fairer and more sustainable city for all.

However, there is a part of the Bill we believe should be strengthened. We are concerned about a broadening of the range of use for income derived from trunk road charging schemes implemented for the purpose of reducing or limiting air pollution. We do not agree with broadening this range for trunk road charging schemes designed to limit air pollution, while at the same time, proceeds derived from schemes implemented for any other reason are "available only for application for the purpose of directly or indirectly facilitating the achievement of any policies or proposals relating to transport." We believe the proceeds in all schemes should only be available to transport policies and proposals.

We believe the proceeds of this type of trunk road charging scheme should be ring-fenced for transport interventions that are evidenced to mitigate the air quality problems that gave rise to the scheme being implemented in the first place. Given the stated intention is to meet the policy objective of improving poor local air quality caused by emissions from transport, it does not seem sensible to us to broaden the range of measures the Welsh Government can implement using the proceeds. We believe that using proceeds locally, in transport schemes designed to reduce emissions and encourage modal shift from emitting vehicles, is the most effective way to address local air quality concerns.

In addition, we would also be concerned that potentially not using the proceeds to mitigate the local emissions caused by transport would damage public confidence in such trunk road charging schemes.

Using ring-fenced funding, the aim of transport interventions in the vicinity of trunk road charging schemes should be to encourage modal shift, consistent with existing Welsh Government policy. Llwybr Newydd clearly sets out the Welsh Government's plans to reduce the number of journeys taken by private cars and increase the number of people walking, cycling and using public transport. The Welsh Government has a target of 39% of journeys to be by sustainable modes by 2030, and 45% by 2040. The Welsh Government has just accepted the recommendation of the Roads Review panel, whose first condition for new Welsh Government investment in road schemes is to support modal shift and reduce carbon emissions.

The types of possible transport interventions are many and varied. However, in terms of air quality we would emphasize that by any measure active travel is the lowest pollution-emitting form of travel. Walking, cycling and wheeling do not emit any local pollution because they do not use carbon fuels. Given the smaller scale of active travel infrastructure compared to road or rail, there is also less embodied carbon and emissions caused offsite during construction.

We know that e-bikes are growing in popularity, and can be used for longer journeys than conventional bikes. 15km is a reasonable distance to travel on an e-bike, and on regional commuter cycleways in some European countries the high use of e-bikes means it is now the average journey length. Building active travel infrastructure with this range in mind was a recommendation of the Roads Review Panel. We know that across the UK, almost two-thirds of trips (64%) involving 'A' roads used these roads for less than 5 miles (8km). Even on UK motorways 40% of trips are less than 10 miles (16km).

Vehicle idling

We support the policy objectives of the Bill to reduce vehicle idling, and especially around hotspots such as schools. As set out throughout this response, emissions from vehicles are

damaging to health, and we welcome any policy aimed at reducing emissions. Pollution emitted while vehicles idle is completely unnecessary and we support efforts to change this behaviour.

We support the intention of the legislation to increase the rate of enforcement of the stationary idling offence, as well as increase the rate of the fixed penalty. Increased enforcement along with higher penalties is more likely to encourage behaviour change, reduce idling and consequently to reduce emissions.

However, we believe this part of the Bill should be strengthened.

The Bill's intention is to enable Welsh Ministers to make Regulations that set a monetary range of penalties that local authorities could impose for the existing stationary idling offence. In effect this would mean an increase in the charge from £20, to a range suggested in the Explanatory Memorandum as £40 - £80. Guidance would be issued to local authorities which would make clear that the higher part of the range could be applied in more serious cases, i.e. in hotspots such as next to schools. The decision on setting the level of fixed penalties within the prescribed range would rest with Local Authorities.

The rationale shared by the Welsh Government for this measure is that a fixed penalty set at £20 does not provide a cost-effective incentive for local authorities to enforce the existing offence. We would question whether a fixed penalty set at the proposed lower limit of £40 is going to make a significant difference to the incentive and to enforcement levels, and to contribute meaningfully to behaviour change.

We are also not convinced by the Welsh Government setting guidance for local authorities on the pricing level for fixed penalties they issue for this offence, whereas currently it is set at a fixed statutory rate for all local authorities. This part of the Bill is premised on the fact that emissions caused while idling should be reduced and that a higher fee is the correct policy to do so. This premise must apply equally across Wales. So we do not understand the rationale for allowing some local authorities to set lower penalties than others. Across Wales, the fixed penalty should be set at an appropriate higher rate to incentivise all local authorities to enforce the offence, creating an effective deterrent and encouraging behaviour change.

While we support the policy objectives of the Bill to reduce vehicle idling, we also believe that the policy objective of reducing emissions at hotspots such as schools can be achieved more effectively by other policies and possible legislation. Indeed, there are many other policies proven to effectively reduce emissions which are not included in this Bill.

"School streets" projects are one such example. They limit the traffic travelling nearby schools at pick up and drop off times. Research from Edinburgh Napier University shows that school streets projects help reduce pollution both in and around schools. A consistent reduction in the volume of vehicles near a school gate would inevitably have a greater impact on emissions than any reduction hoped for by a change in behaviour while idling.

In addition, school streets have other public health benefits such as improved road safety and encouraging children to travel actively.

Sustrans Cymru is a partner to many local authorities and schools within them who are implementing school streets. However, implementation is still relatively slow, and the rate is very varied across different parts of Wales. New schools are still being built in Wales which do not have school streets. This is just one example of a transport policy that is known to be effective at improving air quality in hotspots such as schools, which could usefully be included in the legislation but is not.

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

We welcome the commitment to produce and publish a Soundscapes Strategy.

There is evidence to suggest that traffic noise can be dangerous to our health. There is a level of noise defined by the World Health Organisation which is suitable for people to be exposed to and anything more than that can cause health problems.

Evidence shows that traffic noise can disturb sleep and even increase the risk of stroke. Those surrounded by daytime traffic noise higher than the levels identified were found to be 4% more likely to die. Scientists found that excessive traffic noise can lead to high blood pressure, sleep problems and stress (Halonen, 2015).

The WHO defines 55dB as a noise level that can cause health problems. This is the same level as a loud conversation. WHO guidelines recommend noise levels in a community of less than 30dB. Figures show that many people across Europe are exposed to noise levels which are bad for their health.

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

We support provisions for strategic noise maps and noise action plans. Individuals should not be subject to noise levels that negatively impact health and these plans will ensure a commitment to safe noise levels for communities across Wales.

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

Nothing to add to this section.

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

It will be important to ensure clarity of responsibility for Welsh Government and Local Authorities.

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)?

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and support our joint response to this part of the consultation, as follows:

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.

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

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.

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?

As a member of Healthy Air Cymru, we have worked with partners to develop a shared position on air quality issues and support our joint response to this part of the consultation, as follows:

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 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.

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.

accompanying explanatory Memoranaum or any related matters?
N/A.
14/7.

7. Are there any other issues that you would like to raise about the Bill and the