

AQS 04 Professor Enda Hayes on behalf of staff at the Air Quality Management Resource Centre, University of the West of England

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 Yr Athro Enda Hayes | Evidence from Professor Enda Hayes

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?

Historically, the air quality management process in Wales (and the UK) has been very effective and efficient at identifying and diagnosing air quality problems. However, the process has failed to improve air quality and achieve compliance with some National Air Quality Objectives (and EU Limit Values) due to poorly worded primary legislation (e.g. Environment Act, 1995), insufficient funding for interventions, lack of political will, policy disconnects etc. Overall, we welcome the Bill and we support the principles underpinning it as it seeks to close these gaps and provide a robust yet flexible mechanism to support air quality management in Wales, improve air quality and maximise the public health outcomes.

It is notable that the focus is very much orientated towards road transport and solid fuel burning which is understandable due to our current understanding and concerns. However, the nature of some elements of the Bill (e.g. target-setting) are designed to be futureproofed and flexible (which we support) but we worry, that the Bill doesn't have the same flexibility to tackle other sources and emerging pollutants e.g. ammonia from agriculture.

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)

Creating a process within the Bill to have a target-setting framework that is scientifically robust yet adaptable makes sense as it allows the Bill to be accommodating of new evidence and to be proactive in targeting emerging issues. Using evidence from WHO, Air Quality Expert Group (AQEG), Committee on the Medical Effects of Air Pollutants (COMEAP) and the Welsh Clean Air Advisory Board will be essential for this process.

It is understandable that robust data is needed to support the design and evaluation of these targets. However, we have been measuring air quality in Wales for decades and therefore have a very good understanding of spatial and temporal trends in concentrations and we must ensure that action paralysis doesn't set in while data collection is being improved.

I have some concerns about the timeline for target setting and compliance with that target. My understanding is (1) a specific target in respect of PM2.5 in ambient air will be set within three years of the Bill receiving Royal Assent; (2) this long-term target must be achieved within 10 years; (3) if it is not achieved then a report should be produced with 12 months to explain why; and (4) that report should outline the actions to be taken to achieve it "as soon as reasonably practicable". If we assume the Bill gets Royal Assent in 2024, then the targets are set by 2027, non-compliance is determined in 2037, a report explaining why and what actions should be taken in 2038 and then "reasonably practicable" action taken for an undetermined amount of time to achieve the target. This does not appear to be a timeline to tackle a public health crisis of 1,000 to 1,400 deaths each year! Long-term targets are fine but lessons from 20+ years of air quality management suggests that long-term targets can result in inaction in the early years. What are the interim evaluation steps and proactive measures that can be taken if Wales is not on track to achieve the targets?

It is good to see that there are provisions in place so that Welsh Ministers must ensure that the targets are met but there must be meaningful consequences if they are not achieved. What are these consequences?

Promoting awareness about air pollution (section 8)

«This is a very important part of the Bill but it feels under developed. There has been a notable failure of existing policy to bring citizens, communities and organisations on board with understanding air quality and more importantly helping people to take ownership of the problem and the solutions. 'Promoting awareness', as outlined in the Bill, is very passive and appears to be focussed on traditional 'Transmit and Receive' models of public engagement (e.g. putting data on websites, time-limited consultations etc). We need meaningful public

collaborative and participatory engagement mechanisms, where we can connect people's lived experience (driving to work, taking children to school, shopping, leisure, home heating) to the air quality challenge and then encourage greater ownership by the public of the solutions.

Only by moving beyond 'promoting awareness' can we tackle communication issues related to air pollution such as (1) poor perception of health risk; (2) psychological distance from the consequences and the cost/health elements not being immediately recognised; (3) the negative framing of environmental issues against society e.g. higher taxation, low quality of life etc; (4) better contextualisation to allow people to make sense of data in relation to the real world; (5) overwhelming people with information.

Finally, the wording suggests a one-way transaction of information (i.e. Government to public). Should the Bill be more receptive of a two-way transaction whereby citizen and community evidence can be utilised for awareness raising and evidence gathering to inform Welsh Government e.g. citizen science?

Please note my comment regarding awareness raising and education under the LAQM question 2.v.

National air quality strategy (sections 9 to 11)

The inclusion of a requirement to update the National Air Quality Strategy (NAQS) every 5 years is supported. A NAQS is a very important document if properly co-created and correctly calibrated. Not only can it embrace and operationalise other policies (e.g. making formal connections to Llwybr Newydd 2021, Wellbeing and Futures Generation Act) but it is also one of the primary levers to ensure that the air quality management process is focussed both on prevention and moving beyond compliance. However, for that to happen the NAQS must have meaningful actions rather than vague "policy intentions".

The aim is that air quality management in Wales should be preventative, proactive and focussed on achieving the best air quality to protect public health rather than just compliance. There appears to be a policy disconnect within the Bill in that there are no local/regional mechanisms to support a preventative approach. Therefore, is there a need for explicit legislation that requires the localisation of the NAQS through a series of Regional AQS? The Local Air Quality Management process requires Action Plans (mitigation) where an Air Quality Management Area exists but these plans are not created if there is compliance with the current Air Quality Objective. The creation of Regional AQS can

encourage greater partnership opportunities across policy areas, across local authorities and if co-created with National Government can localise the NAQS to empower proactive measures.

Air quality regulations (section 12)

No substantive comments of this section. It makes sense to update the regulations to be more inclusive in consultation processes. How these consultation processes are run to ensure that they include a broad and representative public voice is most important.

Local air quality management (sections 13 to 15)

The Local Air Quality Management (LAQM) process is no longer fit for purpose and needs a substantial overhaul to incorporate the evolution of our scientific understanding and lessons learnt over the last two decades. As previously stated, the LAQM process is effective and efficient at identifying and diagnosing hotspots but not effective at resolving them. Clarifying and strengthening LAQM legislation to ensure the regime operates more effectively is essential and many of the issues that it faces could be addressed in statutory guidance.

- The LAQM process is a health-based risk management process but the consideration of people beyond “relevant exposure” is largely absent – this could be addressed through innovation in the Review and Assessment process.

- The declaration of the Air Quality Management Area (AQMA) has traditionally been a very techno-centric step. This process could be redefined to consider maximising the public health benefits.

- As previously stated, Local / Regional Air Quality Strategies, with meaningful actions, will be an essential mechanism for collaborative and coordinated prevention of poor air quality and negative public health impacts.

- LAQM can be a powerful tool for improving public engagement and education and ensuring that it goes beyond just ‘raising awareness’. For example, making air quality data available and easy to interpret through interactive tools, timely and regular publishing of air quality reports, public friendly and non-technical summaries of air quality reports, and providing support in the interpretation of data and policies etc.

Finally, it is pleasing to see that the language used to determine compliance has been strengthened. The use of the term “in pursuit of the achievement of the air quality standard” in Section 84(2) of Environment Act 1995 was a notable

weakness. The strengthening of the policy intention to “secure” the standards is very welcome.

Smoke control (sections 16 to 18)

Solid fuel burning is a (re)emerging issue that needs to be addressed urgently, so steps for better enforcement are important.

Lessons can be learned from the LAQM process. At the moment there are only four Smoke Control Areas in Wales and these are focussed on larger urban areas but the LAQM process has shown us that smaller rural towns can also have notable air quality issues. The implementation of Smoke Control Areas needs to be proportionate, targeted, and impactful to address this challenge.

Vehicle emissions (sections 19 to 21)

No substantial comments on this section. Powers to implement interventions are essential as they address a major weakness in existing provisions.

The implementation of CAZ should be carefully evaluated. While evidence does suggest that they have a notable impact on air pollution there are also a substantive social equity issues linked to them, especially if charging is involved.

Targeting anti-idling enforcement on locations where vulnerable groups are makes sense. However, it is important define who are considered “vulnerable”. Certainly, from a health perspective, evidence suggests that young, elderly and those with existing health conditions are most vulnerable to the effects of air pollution so the focus on schools, care homes and health care locations is sensible. Clarity on which agency will be tasked with enforcing vehicle idling offences would be welcome.

National soundscapes strategy (sections 22 and 23)

No substantive comment for this section. This innovative approach is welcome, and it is important to ensure coordinated action across policy areas and environmental concerns (e.g. air quality, noise, climate) to maximise co-benefits and avoid trade-offs.

Strategic noise map and noise action plans (sections 24)

No comment

General provisions (sections 25 to 28);

No comment

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

No comment

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)?

No comment

Are any unintended consequences likely to arise from the Bill?

None that I am aware of.

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?

No comment

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

No comment
