

Welsh Government Consultation: A Clean Air Zone Framework for Wales

<https://beta.gov.wales/clean-air-zone-framework-wales>

Closing date June 19th, 2018

Preamble: While the terms of reference and detail of the consultation are outside the statutory locus of NRW we support the introduction of proposals to improve air quality in a number of urban areas. The establishment of Clean Air Zones (CAZs) under the auspices of The Clean Air Framework should dramatically improve current pollution levels, in certain areas and underpin several goals set out in the Wellbeing of Future Generations (Wales) Act, 2015.

In devising measures to establish a CAZ there is a requirement to target measures to deliver air quality improvements in the shortest time possible. This strengthens the provisions of the existing Air Quality Management Areas (AQMAs) in Wales which operate with a more “open-ended” time scale. Defra have concluded that Local Authorities could achieve statutory nitrogen dioxide limit values within 3-5 years (by 2021) in areas where failures have persisted for many years. Failure by Local Authorities to set up and deliver CAZs could lead to Welsh Government issue direction to them to establish a CAZ.

The Clean Air Framework for Wales provides a comprehensive synthesis of the relevant issues and the approaches involved, from planning a CAZ through to measures available to operate and deliver the requisite air quality improvements.

Introduction: The consultation asks 25 questions and much of the background information to support those answers can be found in the Framework document. However, some questions are hard to answer in detail given the lack of technical data available to support the consultation. For example, in response to question 7 it is hard to give a definitive answer regarding the effectiveness of a charging or non-charging scheme within the CAZ. Area specific cost-benefit analysis and quantification of resulting emission reductions from either option will help inform a final answer as to the benefits of charging or not charging.

Responding to the 15 questions:

NRW has no statutory remit for transport and resulting emissions and therefore no specific technical expertise in this area. However, as well as Local Authorities NRW regulates a number of installations that have the potential to impact upon air quality although in most AQMAs the majority of the nitrogen dioxide pollution arises from vehicle use. Our response to the questions asked with regards vehicle pollution is based on informed advice rather than expert judgement.

Question 1-Do you agree that CAZs would provide an effective way of addressing air quality challenges in Wales?

The introduction of CAZ's could address the most serious air quality issues in Wales, relating to human health. While the measures target nitrogen dioxide within a defined time window the introduction of appropriate emission reductions should also reduce emissions of fine particulate matter a pollutant that has synergistic harmful impacts on human health. The most appropriate approaches and measures, to deliver a CAZ, should be supported by detailed cost-benefit analysis to provide transparency of any measures that are implemented.

However, there are other “air quality challenges in Wales” and the introduction of CAZs will have little or no benefit to other air quality impacts in Wales; for example, any critical load exceedance of nitrogen deposition impacting on habitats. Also the local harmful impacts of ammonia releases on sensitive sites, close to intensive livestock developments such as the rapidly increasing poultry industry in Wales.

Question 2-Should Welsh Government direct local authorities to introduce a Clean Air Zone and if so, under what circumstances should it do so?

The current approach of Welsh Government “directing” local authorities to develop plans to achieve statutory compliance with nitrogen dioxide limit values (for example in Cardiff) would appear to be the most pragmatic and proportional way forward. This allows local informed decision making to comply with the direction. If local authorities fail to provide plans to achieve the limit value, the WG could then propose that local authorities introduce a mandatory CAZ. Either approach should allow compliance “within the soonest period” i.e. by 2021 at the latest.

Question 3-Do you consider the options/advice at section 5 to be suitable and effective elements of a CAZ?

Yes. In most cases road traffic is the main reason for failure of the limit value for nitrogen dioxide and section 5 carries a comprehensive synthesis of available options and advice. However, in some areas local industrial point sources and fugitive emissions can play a role in contributing to poor air quality. Most of these sources should be known to the local authority. Where such sources are relevant their inclusion in the emission reduction plans within the CAZ measures beyond the provisions of section 5 will be required. Where NRW is the regulatory authority for such sources we would work with the Local Authority to ensure improvements in air quality.

Question 4- Do you agree that the minimum emission standards outlined in Annex 2 of the CAZ Framework should be applied to determine road vehicle access in Welsh CAZs and that these standards should be tightened over time in order to apply more rigorous real-world emission data?

Yes. Particularly as a key objective of this exercise is to lower air pollution to limit values as evidence is beginning to emerge that for some pollutants there is no safe level of public exposure. Again, site specific modelling and cost benefit analysis and engagement with business and public interest should inform this approach.

Question 5- Do you agree that Local Authorities should have flexibility to target only those vehicles that may be presenting the biggest air pollution problems locally, or should access restrictions apply to all categories of vehicle, wherever CAZs may be introduced in Wales?

It is probably most effective to allow Local Authorities to target the most polluting vehicles to achieve air quality limit values. In some areas, emissions from buses and Heavy Goods Vehicles will be the major pollution source. So, while all vehicles must comply with set emission standards the greatest reductions may come from targeting specific vehicles. However, a local targeting approach may mean different rules in different towns and cities. So, a vehicle that is “compliant” in Swansea, for example may not be “compliant” in Cardiff. So, vehicles travelling between different CAZs may face confusing and conflicting requirements. This could impact upon haulage businesses, for example. Buses could reduce the number of cars and therefore the overall pollution, but incentives for lower polluting or electric buses would be beneficial. It would be useful if there was sufficient guidance developed in order to ensure consistency in approach across all CAZ.

Question 6- Should Local Authorities have the flexibility to vary times that CAZ restrictions should operate, or would full-time operation provide the most desirable solution in terms of meeting air quality challenges?

The consideration of time restrictions within CAZs may be determined by local circumstances. If monitoring has revealed that air quality failures are solely down to morning/evening “rush-hours” then restrictions during these periods may be the most effective measure by prompting vehicles to avoid these peak times. If air quality failures are more widespread then full time restrictions may be required. As vehicles get cleaner over time restrictions can be reviewed to maximise benefits and minimise impact on road users.

Question 7- Should Welsh Government consider options for mandating either a charging or a non-charging structure in Wales, or should this be left to local authority determination depending on evidence of which of the two may be the most effective means of reducing airborne pollution locally?

In order to ensure consistency across Wales Welsh Government should develop guidelines on when to charge and in what circumstances. Based on such guidance Local Authorities would be able to determine whether a charging/non-charging regime is most appropriate, with any revenue generated used to green public transport, for example. Full cost-benefit analysis should inform the option selected.

Question 8- would a part-charging model bring any benefits over the alternatives of a total ban on non-compliant vehicles, or a charging system with full coverage within the CAZ?

In the absence of data to analyse it is hard to estimate the efficacy of either approach. The air quality outcomes of each approach should be modelled to help inform a decision. A part-charging approach could introduce additional complexity to any charge scheme.

Question 9- Should Local Authorities have full flexibility to determine the level of any access charges that may apply, or should Welsh Government establish national criteria for local authorities to refer to?

To ensure a consistent approach across Wales the Welsh Government should advise on the level of charge. Derivation of national criteria should reflect and draw upon real world examples currently in place elsewhere. This will help determine an appropriate access charge, if this is the preferred option.

Question 10- Do you agree with the proposed vehicles and categories of drivers that should be exempt from meeting published access requirements within a CAZ?

The exemptions in Annex 3 seems comprehensive. However, exemptions should be time limited to promote replacement of existing exempt vehicles by greener fleet replacements by natural replacement and or financial incentives.

Question 11- Do you think sufficient consideration has been given to non-road sources of air pollution in the framework?

That will depend on the source of the pollution requiring a CAZ. While road transport generally tends to dominate background nitrogen dioxide concentrations other local sources can be significant in some areas. For example, contributions from shipping around ports, close to oil refineries or near to STOR units.

The recent uptake in wood burning stoves in urban areas can have significant adverse impact on local air quality (as highlighted by recent studies in London). We understand that this issue will be reviewed as part of the Clean Air Strategy published last month. Lessons can be drawn from other European cities where domestic biomass burners are used extensively. Controls over biomass burning allow its widespread use without adverse impacts on human health.

Question 12- How best should information about a CAZ be made publicly available in order to ensure the clearest and widest possible notice of what access restrictions will mean to those travelling within the area?

Full details should be published on each Local Authority website. All details of individual CAZs could be published via the Welsh Air Quality Forum website. For users that travel between CAZs an APP could be developed to allow users to judge impacts upon their journey

Question 13- do you have any views on how the impacts/success of a CAZ should be measured and how this information should be used to develop a local CAZ over time to ensure the widest ongoing possible benefits for air quality?

An extensive programme of air quality monitoring should be undertaken in the relevant areas prior to during and after implementation of the CAZ to monitoring progress and impact. Measures such as vehicle sharing, or park and ride initiatives may help reduce vehicle numbers. Therefore, measurement of vehicles on the road may also be a good indicator.

Question 14- Could the advice in the draft Framework have any positive or adverse effects on the Welsh Language and how could the document increase the former/mitigate the latter?

If applied correctly the draft Framework should be Welsh Language neutral.

Question 15- Do you wish to make any further comments about the Clean Air Zone Framework for Wales?

This initiative has the potential to address repeated failure of air quality thresholds in many parts of urban Wales. However, while a one size fits all may seem an appropriate approach, regional priorities should inform the application and operation of a CAZ, overseen by a common standards framework from Welsh Government. Enhanced monitoring and modelling should allow the earliest opportunity to demonstrate the efficacy of measures chosen to improve air quality. This should help build public confidence in the use of CAZs.

From an NRW perspective it would be useful to have guidance on how a CAZ should be considered as part of our regulatory work including permitting assessments. Such guidance would also likely be useful for planning authorities in their consideration on planning applications.

In addition we would anticipate that a list of criteria for assigning a CAZ based on requirements on health improvements in areas that have not been assigned as AQMAs would benefit the decision makers in this respect.