

Appendix 1 – Summary of proposed Belfast City Council responses to the Department of Agriculture, Environment and Rural Affairs Clean Air Strategy for Northern Ireland. A Public Discussion Document. November 2020

Chapter 1 - Sources and Effects of Air Pollution

Q1. Should there be legally binding targets for particulate matter, which are based on WHO guidelines?

In its response the Council has advised that it is content that a compelling case exists of the reduction of anthropogenic sources of particulate matter (PM₁₀ and PM_{2.5}) in order to reduce public exposure as far as practically possible and that it would therefore welcome further research and discussion by the Department into the introduction of legally binding targets for particulate matter for Northern Ireland, based on WHO guidelines, informed by an appropriate timescale, and prioritised actions for achievement of the targets.

Q2. Should all automatic monitoring sites measure at least NOx and PM?

The Council has recommended that ambient air quality monitoring should continue to be located and undertaken in order to characterise ambient concentrations for specific pollutants of concern as per the pollutants and objectives of concern and the relevant exposure and other qualifying criteria as detailed in Chapter 7 of LAQM.TG(16). The Council has therefore advised that for those sources that are known to emit both nitrogen oxides and particulate matter, monitoring for both pollutants may be desirable.

In addition, the Council has acknowledged that if legally binding targets for particulate matter, based on WHO guideline values, are introduced for Northern Ireland, significant additional ambient monitoring for particulate matter (PM₁₀ and PM_{2.5}) would likely be required across Northern Ireland to better understand particulate matter concentrations and relevant public exposure in terms of these guideline values. This matter would need to be considered by all competent authorities.

The Council has advised that additional monitoring for nitrogen dioxide across Northern Ireland could assist government in better assessing progress with its Programme for Government, 'Indicator 37: Improve air quality', where the lead measure is nitrogen dioxide concentrations, measured at both urban background and urban roadside monitoring sites. The Council has added that this PfG indicator should be more widely supported across government, down to a regional level and that competent authorities such as the Department for Infrastructure could better contribute towards its achievement through the Department's management and monitoring of the road infrastructure network, and by measuring the air quality impacts of its actions relating to traffic management and encouraging a modal shift towards more sustainable forms of transport at regional, local and neighbourhood levels.

Q3. Should the current urban air quality monitoring network be expanded?

The Council has highlighted that LAQM.TG(16) states that most local authorities have progressively adapted their monitoring strategies in accordance to the air quality issues specific to their administrative area. Over the years, many local authorities have relocated kerbside monitoring sites to roadside or other sites relevant of public exposure. Monitoring networks have also been progressively extended to identify all potential hot spots, whilst a number of sites have been moved elsewhere or closed in areas where data showed continued compliance. The Council has also highlighted the Department's air quality forecasts for all of

Northern Ireland up to 4 days in advance and the associated Air Aware SMS service that alerts subscribers of moderate, high or very high pollution episodes across Northern Ireland, thereby allowing members of the public to take in advance informed actions concerning ambient air quality.

The Council has therefore concluded that the Department should continue to review and where necessary augment the ambient air quality monitoring network for Northern Ireland, recognising the value that such monitoring brings to understanding and measuring progress towards achieving the Programme for Government Indicator 37: Improve air quality, the strategic agenda to be established within the Clean Air Quality Strategy for Northern Ireland and the objectives of the UK Environment Bill.

Q4. Should a targeted approach to exposure, based on population, be used to expand the current monitoring network?

Q5. What are your views on using a population figure of 10,000 as a threshold that triggers the requirement to monitor air quality?

The Department has suggested a targeted monitoring approach based on human exposure of 10,000 people, which would mean that Cookstown, Dungannon, Limavady, Enniskillen, Banbridge, Larne, Omagh, Antrim, Coleraine, Carrickfergus and Newtownards would become part of Northern Ireland's air quality monitoring network. The Council has indicated that it considers a response to this question should be a matter for these towns in the first instance but it is noted that the proposed additional monitoring approach would provide greater ambient air quality monitoring data across Northern Ireland and within the additional population centres that have been identified by DAERA. The Council has indicated also that the local air quality management regime should already have caused monitoring in those locations, where objectives were exceeded and where there was relevant human health exposure.

Q6. Should biomass heating be discouraged in urban areas or in areas with poor air quality?

On the basis of the comments and conclusions within the UKCCC and AQEG reports about the disbenefits of biomass in terms of general ambient air pollution and specifically in terms of particulate matter emissions, the Council has indicated that it is content that biomass heating should be discouraged in what DAERA have described as 'urban areas' or in areas with 'poor air quality'. The Council would however, seek more information from the Department about the terms 'discouraged' or 'poor air quality'. In addition, the Council has highlighted that a substantial portion of Belfast City has already been declared as a series of smoke control areas and that biomass or wood fuels can be burned within smoke control areas within exempted appliances.

Q7. Should the connectivity between air quality and noise issues be improved through requiring consideration of each in Noise and Air Quality Action Plans?

The Department has highlighted that some sources of air pollution have little to no association with noise, for example smoke from chimneys, whilst others have much more of a distinct relationship, including for industrial locations or vehicle noise. The Council has responded that for road transport sources, there may be benefit in linking noise and air quality action plans but this may be on a site by site basis. In addition, the Council has advised that it has not declared any air quality management areas associated with industrial, airport or railway

emissions and so our Air Quality Action Plans have not needed to include mitigation measures designed to address these sources of ambient air pollution at relevant receptor locations.

Q8: Given that air pollution, carbon emissions, and noise often share the same sources, what are your views on including noise and carbon emissions as a consideration in Low Emissions Zones?

The Department has advised that low emission zones are more suited to addressing transport related NO₂ exceedances in city centre streets and are therefore not an obvious solution to exceedances along major trunk roads. On this basis, we have referred the Department to the Council's previous response concerning linking noise and air quality action plans and highlighted that whilst low emissions zones could contribute to addressing carbon emissions within the city centre, the Council's climate change objectives for the city are to be addressed via its Resilience Strategy and forthcoming Climate Adaptation and Mitigation Plan.

Chapter 2 - Transport Emissions

Q9: Are there any potential measures not included here that you believe could help encourage a shift away from private car use to walking, cycling, and public transport?

In responding to this question, the Council has referred to measures detailed within the Council's 2015-2020 Air Quality Action Plan. The Council's response has additionally referred to relevant policies within the Local Development Plan, the Belfast City Council Green and Blue Infrastructure Plan and the 'A Bolder Vision for Belfast - Reimagining the Centre' document. The Council has highlighted the successful 'Belfast Bikes' public bike hire scheme.

Q10: What would encourage you to consider buying an electric vehicle as your next car?

The Council has highlighted a range of issues to be overcome, including limited driving range and associated charging / recharging time, lack of charging infrastructure including residential, workplace and public charging, grid capacity for EV charging, limited current vehicle choices, vehicle purchase costs and residual vehicle values, maintenance and longevity concerns, issues around the recycling of vehicles and their components and concerns around the supply chain for certain constituent components used in electric vehicle manufacture.

Q11: Do you think that DAERA should develop a Low Emissions Zone Framework for dealing specifically with transport emissions in Northern Ireland?

Or

Would you be in favour of Low Emissions Zones for urban areas also covering other sources of pollution, for example, those from household heating?

The Council has noted that the Department has clarified that LEZs / CAZs are more suited to addressing nitrogen dioxide exceedances in city centre streets and are therefore may not be an obvious solution to exceedances along major trunk roads such as the A12 Westlink or the A2 Sydenham Bypass. In its response, the Council has therefore highlighted to the Department that exceedances of the nitrogen dioxide annual mean objective within Belfast have been limited to date to the existing air quality management areas and predominantly, the M1 Motorway / A12 Westlink corridor and at Stockmans Lane.

The Council has however, advised that designation of a low emission zone for transport emissions within the city centre area or elsewhere within Belfast would likely be a matter

principally for the Department for Infrastructure Roads. DfI have already implemented the '*Belfast on the Move*' traffic masterplan for Belfast City centre and have indicated future plans for further deployment of the Belfast Rapid Transit system and for Phase 2 of Belfast Streets Ahead, which will pedestrianise Donegall Place link it to the City Hall. Accordingly, the Council would recommend that the need for a low emission framework for dealing specifically with transport related emissions and the need for low emission zones for Belfast City centre, or indeed elsewhere within the city, should be determined through research by the Department for Infrastructure, in collaboration with Belfast City Council, and be based upon ambient monitoring data, traffic management requirements and any necessary transition from highly emitting road vehicles towards newer and more sustainable modes of transport.

In relation to household heating, the Council has highlighted that the majority of the city has been declared as a series of smoke controls areas, adding that it has not declared any air quality management areas for household emissions of sulphur dioxide or particulate matter. On this basis, the Council has advised that low emissions zones for urban areas covering other sources of pollution, including for example, those from household heating, would not likely be necessary at present for the Belfast City Council area. The Council has acknowledged however that this matter may have to be revisited in the event that WHO guideline values are adopted as standards for particulate matter (PM₁₀ and PM_{2.5}) across Northern Ireland.

The Council's response includes a recommendation that that the Department should consider undertaking further research and development of the Low Emission Zones for other sources of pollution such as household heating, and provide additional information to councils, other government Departments and Housing Associations, etc. for their consideration as to the anticipated administrative, human health and environmental advantages of this proposed combined Low Emissions Zone approach.

Q12: What are your views on vehicle charging cordons for entry to the most polluted parts of urban areas in Northern Ireland?

In its response, the Council has sought clarity as to what the Department means by the term, '*most polluted parts of urban areas*'. In addition, the Council has advised that similar to its response to Question 11, the introduction of a vehicle charging cordon for the city would be a matter principally for the Department for Infrastructure Roads. To that end, the Council has recommended that DfI should undertake research, in collaboration with Belfast City Council, into the need for a vehicle charging cordon for the city, based upon ambient monitoring data, traffic management requirements and any necessary transition towards more sustainable modes of transport.

In its response, the Council has added that an additional requirement for a low emission zone or clean air zone is that it should also take action as necessary to support growth and protect the economy of local high streets and town centres, whilst ensuring that clean air zone proposals do not simply result in the displacement of the most polluting vehicles away from town centre to the surrounding areas, thereby causing a deterioration in ambient air quality at those locations. The Council has highlighted that these additional obligations would have to be achieved in the event that a low emission zone or vehicle charging cordon was to be introduced for the Belfast City Council area.

Chapter 3 - Household Emissions

13: Should urban areas, in their entirety, be designated as Smoke Control Areas?

The Council's response highlights that the majority of Belfast City has already been declared as a series of smoke control areas with the exceptions of some areas of north Belfast adjacent to the Cavehill where there are no residential dwellings, the port area and areas of other Councils that were subsumed into the Belfast City Council area as part of the local government reform process and were not declared as smoke control areas by their former Councils. The Council has therefore highlighted that an extension of the existing smoke control areas to the city urban area, in entirety, would serve to incorporate those areas that were not previously declared as smoke control areas by Belfast City Council and those areas that were subsumed into the Belfast City Council area during the local government reform process and were not declared as smoke control areas by their former Councils.

The Council has highlighted that smoke control grant support was previously provided to the Council by the former Department of the Environment for Northern Ireland (DoENI) and that similar grant support would be necessary from DAERA at a regional level if urban areas were, in their entirety, to be designated as Smoke Control Areas.

Q14: Should the law should be changed so that non-smokeless fuels may not under any circumstances be sold in Smoke Control Areas?

The Council's response highlights that as the Belfast City Council area has substantially been designated as a series of smoke control areas, a ban on the sale of non-smokeless fuels within the smoke control areas would further assist in their operation and with compliance matters. It would not however, preclude householders from purchasing non-smokeless fuels in areas located outside of smoke control areas and inadvertently using them within the smoke control areas. In addition, the Department would have to consider the matter of the provision of unauthorised fuels for use in exempted appliances.

Q15: Should government ban the sale to the general public of smoky / bituminous / household coal in Northern Ireland?

The Council's response indicates that a ban on the sale to the general public of smoky / bituminous / household coal in Northern Ireland would lead to further improvements in ambient air quality, particularly within residential settings, and would also assist with compliance within the Council's smoke control areas and by reducing household emissions within the wider city boundary by preventing the use of smoky/bituminous/household coal fuels.

Q16: Should government ban the import, into Northern Ireland, of high-sulphur coal?

The Council's response highlights that the Sulphur Content of Solid Fuel Regulations (Northern Ireland) 1998 already preclude the sale by retail or delivery of any solid fuel having a total sulphur content greater than 2% but adds that the Regulations do not prohibit the delivery of any such fuels to premises other than a private dwelling; or the possession of any such fuel for the purposes of its use in the manufacture of solid fuel; or its export from Northern Ireland. The Council's response therefore advises that a ban on importation of high-sulphur coals may not have an appreciably additional beneficial impact on local ambient air quality as long as the solid fuels being placed in the marketplace are in compliance with the 2% sulphur content requirement of the above-mentioned Regulations. The Council has advised however that the Department may wish to introduce a ban on the importation of high sulphur coal as a general means of improving ambient air quality across Northern Ireland.

Q17: Should government ban the sale to the general public of unseasoned wood in Northern Ireland at retail outlets?

The Council's response indicates that it would be helpful if the sale of unseasoned wood to the general public in Northern Ireland at retail outlets could be restricted in order to reduce the potential for unseasoned wood to be used and excessive smoke and other air pollutants to be emitted, adding that the Defra 'Ready to Burn' scheme already establishes a benchmark for logs and other wood fuels to help consumers identify wood that has been carefully chosen and is 'Ready to Burn' for the benefit of their appliance and the environment.

Q18: Are there any further things you think that central and local government could be doing to address air pollution from burning solid fuels?

In its response, the Council has highlighted the need to update the Clean Air (Northern Ireland) Order 1981 to include, where necessary, additionally updating subordinate or supporting legislation. The Council has additionally highlighted that should urban areas, in their entirety, be designated as smoke control areas, DAERA will have to provide suitable grant support to enable appliance conversions.

Chapter 4 - Agricultural Emissions

Q19: Do you think that the process in place to address ammonia emissions in Northern Ireland is appropriate?

In its response, the Council has highlighted the need for gaps in knowledge concerning ammonia emissions from non-PPC regulated farms to be addressed, for further research into cross-boundary effects, for research into mitigation and pollutant reduction technologies, for improvements to the Proposed Development Assessment and for better public awareness.

Chapter 5 - Industrial Emissions

Q20: Are there any industrial sectors or air pollutants that require new or further investigation?

In its response, the Council has highlighted issues around controlling fugitive emissions associated with unloading of dusty cargoes from shipping that are not presently controlled under the PPC regime. The Council has also highlighted the need for Departmental guidance to assist with permitting of Medium Combustion Plant.

Chapter 6 - Local Air Quality Management

Q21: Should councils more widely adopt low-cost air quality monitoring systems, for screening purposes?

The Council's response indicates that Northern Ireland councils should more widely adopt low-cost air quality monitoring systems, for screening purposes but that the screening methodology to be employed should be appropriate and cost effective to the pollutant and averaging period of the air quality objective under consideration. Examples might include AQMesh, Zephyr, Aeroqual or Purple Air type small sensor air quality monitoring systems.

Q22: Should AQMAs should be discontinued and replaced instead with Low Emissions Zones, which cover all aspects of air quality, including Smoke Control?

The Council's response recommends that the Department should undertake further research and development of this recommendation and provide additional information to Councils, competent authorities and other bodies involved in local air quality management for their consideration as to the anticipated administrative, human health and environmental advantages of the Department's proposed approach that would see AQMAs discontinued and replaced with Low Emissions Zones.

Q23: Where applicable, should the entirety of urban districts should be declared as AQMAs (or Low Emissions Zones)?

The Council's response highlights that Part III of the Environment (Northern Ireland) Order 2002 already provides for district councils to designate as an air quality management area all or any part of its district in which it appears that ambient air quality standards or objectives are not being achieved, or are not likely to be achieved within the relevant period.

The Council's response additionally highlights that there may be benefits in declaring the entirety of urban districts as an AQMA or Low Emissions Zone as such an approach could encourage the development of mitigation measures across a wider urban area and population as opposed to focusing only within the AQMA, which may have been declared to address relatively minor or individual human health exposure. This approach would also ensure that any control measures applied within, for example, a transport related AQMA, do not simply encourage road vehicles to 'rat run' into adjacent areas with an associated disbenefit to ambient air quality in those locations. A district wide AQMA may also enable other ambient pollutants to be concomitantly proactively addressed. The Council would consider however, that DAERA and other government Departments / relevant authorities should, where necessary, be part of this decision making process as in many instances, it will fall to them to introduce the required strategies and actions, together with funding support, to create the necessary regional and local improvements in ambient air quality.

Finally, the Council response highlights that a significant portion of daily road traffic across Belfast is associated with commuters travelling into and out of the city. On that basis, the Council has recommended that the Department should give consideration, from an ambient air quality perspective, as to how road transport and road transport emissions can be more coherently and effectively; managed across the entire Belfast Metropolitan Urban area.

Q24: What are your views on having a traffic-light system for councils to report on?

In its consultation response, the Council has recommended that the Department should give consideration to aligning and streamlining central and local government local air quality management obligations and associated reporting requirements in order to create a more coherent and optimum ambient air quality outcome from both processes.

In addition, the Council has suggested that Air Quality Action Plans should include strategic and local actions from competent authorities that are proven to deliver relevant air quality objectives, as well as contributing towards PfG Indicator 37 for improving air quality and to community plans, i.e. the Belfast Agenda. The Council is therefore of the view that relevant authorities should also be required to monitor and report on their performance against

government guidance and in that way, effectively contribute to the various Air Quality Action Plans and to the achievement of the air quality objectives / limit values.

In relation to the proposed traffic light system, the Council has suggested that further engagement is required between DAERA, Northern Ireland Departments and local councils concerning the proposed traffic light system and various descriptors for Northern Ireland local air quality management reporting, where they are to apply to low emission zones.

Q25: What are your views on the proposals to change the LAQM process, in particular to grant funding for outcome-based measures as opposed to monitoring?

The Council has indicated in its response that LAQM grant funding should focus more on projects that deliver tangible improvements in ambient air quality, as opposed to just monitoring. The Council would consider however, that existing or additional monitoring may be necessary as a component of a specific project in order to ensure that it is delivering the anticipated ambient air quality benefits and in that regard, the monitoring should be supported through the LAQM grant process. The types of monitoring equipment that may be needed for future LAQM projects and that should be funded could include, for example, diffusion tubes, small sensor air quality monitoring systems or additional reference grade analysers for characterising particulate matter (PM₁₀ and PM_{2.5}) concentrations, should WHO guideline values be adopted as standards for Northern Ireland

Q26: Are there any further measures you would suggest to help achieve a significant reduction or revocation of all AQMAs by 2021?

The Council's response has highlighted the impact of the ongoing Covid 19 pandemic on ambient air quality across the city and further afield during 2020. Provisional 2020 automatic monitoring data for nitrogen dioxide shows a significant reduction in roadside and background concentrations across the city when compared to 2019 data. It should be noted that if nitrogen dioxide annual mean concentrations across the Council's various automatic monitoring sites and air quality management areas were to remain at 2020 levels, there would likely be no exceedances of the national objectives for nitrogen dioxide within the city and as a consequence, all of our AQMAs might be able to be revoked.

The Council has in its response confirmed however, that it will continue to operate its various ambient air quality monitoring stations and sites across the city in order to understand how ambient concentrations of nitrogen dioxide and other ambient pollutants are affected throughout the pandemic and recovery process.

Chapter 7 - Communication

Q27: Do you have any suggestions for the membership of the Air Quality Forum?

In its response, the Council has suggested that Forum membership might include representatives from relevant 'competent authority' partners, to include Translink / Northern Ireland Railways, together with representation from other organisations that can contribute views and actions to further reduce ambient air pollution, including for example, planners, industry and industry bodies, housing associations, airport and port operators, freight and road haulage associations, taxi and other transport providers, Sustrans, Shared Environmental Services and the Public Health Agency, etc.

Q28: Is increasing awareness of air quality impacts at a local level the best way of promoting behaviour change by individuals to reduce air pollution?

In its response, the Council has advised that whilst economic incentives may be the contributing factor for one individual, the same incentive may not engender an equivalent change for another individual. The Council has advised that it is therefore necessary to use communication and education on ambient air quality issues, alongside economic, health and environmental incentives, in order to encourage behavioural change from all socio-economic levels and provide a helping hand to those who are most affected by ambient air quality issues.

Q29: Do you have any further comments or suggestions on how the impacts of policy interventions can be tracked in Northern Ireland?

In its response, the Council has made reference to the Public Health England, '*Review of interventions to improve outdoor air quality and public health*' document and associated guidance. In addition, the Council has suggested that the Department should make better use of the various monitoring data, information and reports contained within the Northern Ireland Air website and develop further Northern Ireland specific policy guidance for local authorities and other air quality actors to utilise, based upon Northern Ireland local air quality management needs and priorities.