

Economic Development & Transport Policy & Scrutiny Committee

10 May 2017

Report of the Assistant Director – Legal & Governance

Air Quality Scrutiny Review Scoping Report

Summary

1. This report presents the Economic Development & Transport Policy & Scrutiny Committee (EDAT) with information to help members decide ways to progress a scrutiny review into air quality in the city.

Background

2. At a Full Council meeting on 15 December 2016 Cllr D'Agorne submitted a Motion (Annex 1) around air quality and Council agreed to refer the issue to Corporate & Scrutiny Management Policy & Scrutiny Committee (CSMC) for further examination.
3. While CSMC has an overarching responsibility to oversee and co-ordinate the work of the four standing Policy & Scrutiny Committees, the Motion as presented was not within the remit of CSMC, and at a meeting on 13 February 2017 CSMC did not take up the option of exercising its power to promote a culture of continuous improvement across all corporate, strategic and business services through developing, challenging and reviewing those services.
4. Specific elements of the Motion – air quality, carbon reduction, Local Plan, environment strategy and transport strategy – all fall within the service plan area of EDAT and CSMC agreed to refer the Motion to this committee.
5. At their meeting on 8 March 2017 EDAT Members agreed that it was important that the Motion be dealt with by a committee with the expertise to understand the background and work already being undertaken around air quality and further agreed to undertake a scrutiny review to ensure air quality issues affecting the city are given due consideration.

6. Subsequently, after the EDAT meeting at the beginning of March, Council considered a report on Future Ways of Working in Scrutiny and agreed a restructure of scrutiny committees. As such, EDAT would cease to function as it does are present, to be replaced by two Economy and Place scrutiny committees for a 12 month pilot period after which it will be reviewed. The new Committees agreed by Council are:
 - Economy and Place Policy Scrutiny Committee – focussing on policy development, strategic objectives and horizon scanning for best and emerging practice across all Economy & Place service plan areas.
 - Economy and Place Service Scrutiny Committee – focussing on performance and customer expectations across all Economy & Place service plan areas, and major project progress.
7. As yet the make up of the membership of the new committees has not been agreed.
8. In March 2017 the Council's Public Protection Manager and the Assistant Director of Public Health gave a Members' presentation outlining the detailed work currently being undertaken by officers on air pollution and health.
9. Officers explained that air pollution is a mix of particles and gases that have adverse effects on human health. The main pollutants of concern in York are particulate matter (PM) and nitrogen dioxide (NO₂).
10. Particulate Matter is measured in different size fractions – PM₁₀, PM_{2.5} and PM₁
 - PM₁₀ is the fraction local authorities are required to monitor as part of their Local Air Quality Management (LAQM) duties;
 - PM_{2.5} (which includes PM₁ and PM_{0.1}) can get deep into the lungs. It has the strongest epidemiological link to health;
 - The very smallest particles <PM₁ are known as ultrafine particulate. These can pass directly into the bloodstream.
11. LAQM targets set for PM₁₀ are met in York. The majority of health impacts are related to the finer PM_{2.5} fraction. There are currently no known safe levels for PM_{2.5}, so the aim must be to reduce them as far as possible. PM_{2.5} measured in the 'hotspot' areas of Bootham, Gillygate and Fishergate, meet the EU limit value.

12. Health based objectives exist for other pollutants such as ozone, sulphur dioxide, carbon monoxide, benzene, 1, 3-Butadiene and lead but these are not of current concern in York. Air pollution 'hotspots' in York are all transport related
13. The Environment Act 1995 requires all local authorities to: *“review and assess air quality in their areas and to declare Air Quality Management Areas (AQMAs) where objectives set by the government are unlikely to be met at relevant locations”*. Where an AQMA is declared an Air Quality Action Plan (AQAP) must be drawn up and implemented.
14. The first city centre AQMA was declared in 2002 and the first action plan in 2004 was based around a modal shift in transport. This was updated as AQAP2 in 2006 and included local plan measures, although these were still mainly based around modal shift. AQAP3 was adopted in late 2015 – mainly around low emission measures aimed at reducing tailpipe emissions and preventing further exposure. Modal shift measures, while still significant, are delivered via the Local Transport Plan and the sustainable transport team.
15. The Council aims to tackle emissions at all levels through its low emission strategy so as to ensure air quality in York becomes as good as it can possibly be within local budget and practical constraints. Measures already delivered include two mainly electric Park & Ride routes, an extensive electric vehicle charging network including Pay As You Go fast charging, conversion of 13% of the taxis to low emission through taxi incentives and a new low emission taxi licensing policy and low emission planning guidance.
16. To help the Committee in considering a remit for the proposed review, the Council's Public Protection Manager has suggested a number of topic areas which may add value to work already being undertaken around air quality, although the final remit will be dependant on workload and delivery time.
17. These include how is air quality (and carbon emissions) considered when key decisions are made by CYC, especially for:
 - Infrastructure projects
 - Public Transport
 - Locations of new facilities e.g. schools, nursing homes,
 - Energy for CYC owned/operated buildings
18. CYC emissions – how can these be reduced including via procurement?

- The Park and Ride bus contract (cost benefit analysis for electric vs. diesel buses)
- Procuring Electric / Low Emission vehicles in the CYC fleet to remove diesel vehicles – how does CYC comply with requirements laid out in Cleaner Road Transport Vehicles Regulations 2011 that requires public sector organisations to consider the energy use and environmental impact of vehicles they buy or lease?
- Procuring home to school transport (buses and taxis)
- Requiring ECO-Stars membership for all suppliers providing goods and services
- Heat and power provision across CYC's estate and operations
- Staff travel

19. Freight – how can we reduce emissions from freight?

- How can we reduce emissions from 'last mile' city centre deliveries?
- Economics of a freight transshipment / consolidation centre
- Consolidating parcel deliveries
- Cycle couriers
- Opportunities to use out of town retail parks for consolidating goods for onward travel to city centre
- Compressed natural gas (CNG) refuelling
- Further funding for Eco-Stars
- Freight Strategy?
- Reducing emissions from large goods vehicles (LGVs)

20. Planning – how can we reduce emissions from development?

- Low emission planning utilising common principles
- Addressing and assessing impacts of local plan allocations
- Developer contributions to low emission / air quality mitigation
- Low emission travel planning / ongoing review of measures put in place by developers

21. Parking policy – how can we encourage a switch to low emission vehicles through our parking policies?

- Electric vehicle charging
- Ultra low emission vehicle (ULEV) discounts
- Workplace parking
- Low emission car parks
- Car clubs

22. Promotion and publicity – how can we make people more aware of the impact of air pollution?
- Effective delivery of key messages relating to air quality and health
 - Inter-departmental collaboration / joint working with public health, transport, sustainability.
23. Every year City of York Council must submit an Annual Status Report (ASR) to the Department for Environment, Food and Rural Affairs (DEFRA), detailing current air quality concentrations in York and outlining progress on delivery of Air Quality Action Plan measures. The next ASR is due June 2017.
24. In addition the Public Protection Manager produces an annual air quality statement for the Executive member for the Environment and the next will be considered at a Decision Session in August.

Analysis

25. Air pollution particularly affects the most vulnerable in society: children and older people, especially those with existing heart and lung conditions. Air pollution is recognised as a contributing factor in the onset of heart disease, strokes and cancer and has been linked to low birth weights and reduced IQ in children.
26. The main air pollutants of concern in York are NO₂ and particulate matter (PM). Typically traffic is responsible for around 50-70% of the total NO₂ at any particular location in the city, although the exact amount varies according to proximity to roads and other emission sources.
27. Diesel and petrol cars now make up almost equivalent numbers in the York fleet but the NO_x and NO₂ impact of diesel vehicles is much higher than for petrol. Likewise LGVs, HGVs and buses make up only a small fraction of the fleet but have a disproportionate impact on NO_x and NO₂ emissions. The air pollution hotspots in York are all transport related.
28. York began monitoring air quality in the late 1990s and now has eight real time monitoring stations giving minute by minute data, mainly NO₂ and PM. In addition to the continuous monitoring sites CYC also has 250 diffusion tubes located around the city. These are small plastic tubes, which contain metal gauze in the base of the tube which is covered in a chemical which reacts with NO₂. These are exposed on a monthly basis and sent off to a lab for analysis.

29. There are a number of key threats to air quality and public health improvement in cities such as York:
30. Firstly, new development leads to traffic growth in the city, and the resulting cumulative traffic emissions (known as 'emissions creep') may offset vehicle emissions improvements. Whilst emissions can be mitigated through our low emission planning guidance, 'permitted development rights' exist for certain types of development, such as the conversion of offices to residential in city centre and industrial locations. In these cases the council has no powers to refuse the applications but tries to work with developers to mitigate the impact of air pollution on future residents.
31. The second threat is the increased numbers of diesel vehicles – primarily as a result of a carbon-based taxation system favouring diesel vehicles and also likely to have been affected by the government's car scrappage scheme. A consequence of the particulate abatement on modern diesels is that they tend to have higher NO_x and primary NO₂ emissions than petrol vehicles. This applies not only to private cars, but also to vehicles such as diesel taxis and buses in the city which are responsible for a large number of vehicle movements throughout York and especially in the city centre Air Quality Management Area. Linked to this are issues such as vehicle idling which, particularly for larger vehicles such as buses/coaches, can have a significant impact on local air quality.
32. Tied in with that is the news about the VW emission scandal – the main issue being the US Environmental Protection Agency (EPA) found that the VW Group had built diesel cars with 'defeat device' software designed specifically to cheat emissions tests. Dozens of studies have concluded that there is a significant difference between laboratory emissions tests and those conducted in real world scenarios, even for new Euro 6 diesel cars, most of which fail to meet current emission limits.
33. Finally there are individual lifestyle choices that people make about how to travel, which vehicles to buy, how to get children to school and home shopping. This is probably a result of lack of understanding about air quality issues and the impact on their health and that of others. Education and access to air quality information can also be a barrier to air quality improvement.

Council Plan

34. This report is linked to the Prosperous City for All and A Council That Listens to Residents priorities in the Council Plan. Improvements in air quality will help residents live healthier lives so they can contribute to their communities, reach their full potential and retain good quality jobs, it will help deliver an environmentally sustainable city and help protect and support York's unique heritage.

Conclusions

35. It is accepted that the main air pollutants of concern in York are NO₂ and particulate matter (PM) and that typically traffic is responsible for around 50-70% of the total NO₂ at any particular location in the city.
36. A significant amount of work is already being carried out by Council officers to monitor and improve air quality in the city, including statutory reports to DEFRA, and any review should not duplicate work already being undertaken.
37. City of York Council declared three Air Quality Management Areas where the health based national air quality objectives for NO₂ are currently exceeded – in the city centre, Fulford and along Salisbury Terrace. CYC has a statutory duty to try to reduce NO₂ concentrations within these AQMAs and additional obligations in relation to the protection of public health and reduction of greenhouse gas emissions.
38. The impact of air pollution on health can only be estimated. The best current estimate is that air pollution causes around 40,000 deaths per year in the UK. Modelled mortality indicators for York put the mortality rate attributable to particulate matter alone at 12 per 100,000.
39. The main cause of air pollution is traffic, but as this covers such a broad area it is unlikely that a scrutiny review into ways of preventing traffic-related air pollution will be achievable within an acceptable timeframe particularly if the review is to include SMART (specific, measurable, agreed, realistic, and time-related) recommendations.
40. Looking at ways to reduce diesel emissions is a more realistic alternative, especially ways in which City of York Council can reduce its own emissions by replacing its diesel fleet with low, ultra low or zero emission vehicles via procurement. CYC has huge buying powers within the local economy and a switch away from diesel could encourage and influence other transport operators and providers to do the same.

41. As mentioned in paragraph 6, Council has agreed a restructure of scrutiny committees which will see EDAT cease to function as it does at present with its work being taken on by two Economy & Place scrutiny committees. As such it would be inappropriate for EDAT as currently constituted to embark on a substantial scrutiny review at this stage.

Consultation

42. This report has been prepared with the co-operation of CYC Public Protection Manager.

Options

43. As Members have already agreed in principle that a scrutiny review of this topic is appropriate the Committee may chose to:
- Agree this topic be presented to the first meeting of the appropriate new scrutiny committee to be considered during the course of the next municipal year and;
 - Ask the appropriate new committee to consider a focused scrutiny review around ways in which CYC can reduce diesel emissions emanating from its fleet.

Implications

44. This report is for information only and there are no implications at this stage.

Risk Management

45. This report is for information only.

Recommendation

46. Having considered the information in this report the Committee is asked to agree that the appropriate new scrutiny committee is recommended to undertake a focused scrutiny review around ways in which City of York Council can reduce it own emissions by replacing its diesel fleet with low, ultra low or zero emission vehicles.

Reason: To ensure air quality issues affecting the city are given due consideration.

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Wards Affected:

All

For further information please contact the author of the report

Annexes

Annex 1 – Council Motion

Abbreviations

AQAP – Air Quality Action Plan
AQMA – Air Quality Management Area
ASR – Annual Status Report
CNG – Compressed Natural Gas
CSMC – Corporate & Scrutiny Management Policy & Scrutiny Committee
CYC – City of York Council
DEFRA – Department for Environment, Food and Rural Affairs
EDAT – Economic Development & Transport Policy & Scrutiny Committee
EPA – Environmental Protection Agency
HGV – Heavy Goods Vehicle
LAQM – Local Air Quality Management
LGV – Large Goods Vehicle
NO₂ – Nitrogen Dioxide
NO_x – Nitrogen Oxide
PM – Particulate Matter