

# ABERDEEN CITY COUNCIL

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COMMITTEE	Council
DATE	21 June 2017
REPORT TITLE	Air Quality Low Emission Zones
REPORT NUMBER	CHI/17/141
DIRECTOR	Bernadette Marjoram
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## 1. PURPOSE OF REPORT:-

The report responds to the undernoted decision of the Council on 15 March 2017:-

*“to instruct the Chief Executive to prepare a business case around the feasibility of Aberdeen City Council introducing Low Emission Zones throughout the city. To agree that the Scottish Government, partner organisations and stakeholders have significant roles in the development of any business case and that the business case must reflect the legislative position of the Scottish Government and instruct the Chief Executive to provide members with an initial report at the June 2017 Council meeting on progress.”*

## 2. RECOMMENDATION(S)

That the Council agree:-

- a) To instruct the Director of Communities, Housing and Infrastructure to carry out a Low Emission Feasibility Study in accordance with the methodology detailed in Technical Guidance and prescribed timescales;
- b) To instruct officers to inform the Council of the study outcomes and recommendations at prescribed stages of the assessment process as detailed in the Technical Guidance;
- c) To note the ‘Next Steps’ section explaining the Feasibility Study process and role of partner organisations; and
- d) To instruct the Director of Communities, Housing and Infrastructure to volunteer Aberdeen City Council to be an early adopter should the feasibility study indicate that it may be appropriate to introduce a Low Emission Zone in Aberdeen.

### **3. BACKGROUND/MAIN ISSUES**

#### **3.1 Background**

- 3.1.1 Since the meeting of Council on 15 March 2017 the Chief Executive has taken preliminary steps in order to prepare the business case around the feasibility study of Aberdeen City Council introducing Low Emission Zones. Prior to the business case being prepared a feasibility study must be undertaken.
- 3.1.2 Cleaner Air For Scotland – the Road to a Healthier Future (CAFS) is a national cross-government strategy that sets out how the Scottish Government and its partner organisations propose to reduce air pollution to protect human health and fulfil Scotland’s legal responsibility to meet EU air quality objectives.
- 3.1.3 Local authorities have a role in the implementation of various key actions within the Strategy, including traffic management, development management, communications and active travel. Of major significance is the requirement for authorities with Air Quality Management Areas (AQMAs) to undertake a Low Emission Feasibility Study. A working group with representation from the Scottish Government, SEPA, Transport Scotland, the four major city local authorities (Aberdeen, Edinburgh, Glasgow and Dundee), and other key partners has been formed to progress the CAFS actions.
- 3.1.4 There are three Air Quality Management Areas (AQMAs) in Aberdeen as shown in Appendix 1; the City Centre, Anderson Drive/Haudagain roundabout/Auchmill Road corridor and Wellington Road (Queen Elizabeth II Bridge-Balnagask Road). We will therefore be required to undertake feasibility studies in these areas. National guidance on the study methodology is likely to be available for consultation in late summer 2017. It is anticipated authorities will be required to complete the assessment process by early 2018. Potential LEZ/CAZs (Low Emission Zones/Clean Air Zones) schemes will be considered nationally and final designated areas not determined until 2018 at the earliest with at least a 2 year lead in period.
- 3.1.5 In September 2016 the Scottish Government announced its Programme for Scotland 2016-17. This Programme committed to a Low Emission Zone being introduced as a pilot somewhere in Scotland by 2018 and has necessitated a total refocus of the CAFS working group. The implementation of a LEZ is a complex process and the 2018 timeframe is unrealistic, however the CAFS group is exploring various options that could potentially meet the Government’s objective as an interim measure.

#### **3.2 National LEZ/CAZ Development Progress**

- 3.2.1 Transport Scotland, in conjunction with partner organisations, is leading in the development of the national LEZ regime. Significant progress has already been made to support essential elements that will be required to introduce LEZs. These include the development of the necessary legal framework, an assessment of potential enforcement methodologies and funding options both to upgrade non-compliant vehicles and support the introduction of any LEZs. Consultants have been appointed to develop Technical Guidance to support the assessment of AQMAs and Economical Appraisal Guidance to support a review of the potential costs to implement LEZs. Further discussions are ongoing to establish the role of local authorities and other partners in the carrying out of health and economic impact assessments and any Business Cases that would be necessary to justify a Low Emission Zone.
- 3.2.2 The assessment of potential Low Emission Zones is complex, though the principles generally follow those of a Scottish Transport Appraisal Guidance. The Technical Guidance currently being developed describes a three stage assessment process of increasing complexity to enable the screening out of LAQMs where a low emission

approach would be inappropriate. Other air quality improvement initiatives as detailed in local Air Quality Action Plans should be used to improve air quality in these locations.

- 3.2.3 Previous studies indicated buses in particular are the most significant source of emissions within many of the most polluted streets in the four main cities in Scotland. The Transport Commissioner has the ability to restrict the access for buses failing to meet a prescribed emission standard in specific areas via a Transport Regulation Order (TRO). This process has been applied in other UK cities, including Brighton and Oxford, to create a LEZ and support the introduction of cleaner buses. The Transport Commission is generally receptive to the potential use of these powers in Scotland, provided appropriate supporting information is presented to justify this approach. The adoption of Transport Regulation Orders for buses is currently being further explored by the CAFS group and could potentially help meet the challenge to have a LEZ by 2018. Various work streams are being investigated that would be necessary to support a bus LEZ. These include an assessment of the current vehicle fleet age, possible exemptions, costs to upgrade non-compliant vehicles, the 'phasing in' for vehicles and whether a 'period of grace' should be adopted to enable fleet operator compliance. However, it would be presumptive to target buses without evidence to demonstrate buses are the main source of raised pollution levels, therefore the contribution of all vehicle classifications will be assessed. Furthermore, the Transport Commissioner has made it clear that any TRO should address congestion and support bus services by improving bus journey reliability and punctuality and increased passenger numbers.

### **3.3 Aberdeen Air Quality Model**

- 3.3.1 A major traffic count, commissioned by Transport Scotland, at over 80 locations in Aberdeen was carried out in March 2017 to support the update of Aberdeen's air quality model. SEPA is developing the model using the traffic count and local air quality data. Although officers are involved in both initiatives, there are no direct costs to the authority. The traffic count information will additionally help support the council's traffic model and other transportation and city development projects.
- 3.3.2 The air quality model will be used to assess pollution levels across the AQMAs and enable the source apportionment of transport related emissions to vehicle classifications such as buses, HGVs, diesel cars and taxis on specific road links. The potential air quality improvement from various potential intervention scenarios can then be tested to indicate those that would have most benefit. These could include, for example, the upgrade of all buses or HGVs to Euro 6 or restrictions on older or non-compliant diesel cars in particular areas.

### **3.4 Air Quality in Aberdeen and potential LEZs**

- 3.4.1 Air quality in Aberdeen has improved in recent years although there are still hotspots of exceedances of the national and EU air quality objectives within the City's three Air Quality Management Areas. Officers will commence the feasibility study in accordance with the timetable and process within the Technical Guidance currently being developed by Transport Scotland. Until this process is progressed we will not be in a position to consider whether a low emission zone is appropriate in Aberdeen, or, if so, the types of vehicle that may be restricted in particular areas. Other traffic management measures such as the pedestrian priority of Broad Street and actions to reduce city centre traffic flow and congestion and promote the uptake of cleaner vehicles may sufficiently improve air quality to negate the requirement for vehicle restriction enforcement.

### **3.5 Next Steps**

- 3.5.1 The air quality model should be completed and available in early summer 2017. Officers will then commence a study of the contributing sources of emissions and review actions that could be taken to improve air quality.
- 3.5.2 Issues around resources are being considered at a national level to determine what support will be necessary for local authorities to progress the LEZ should this be adopted. Potential cost implications to local businesses and other stakeholders, publicity and a communications strategy are also being co-ordinated nationally, although significant local involvement will be required once potential LEZ locations are established.
- 3.5.3 Guidance on the feasibility study process and the framework for key aspects such as health and economic assessments, business cases, enforcement regimes and roles and responsibilities for local authorities, Transport Scotland and other partners are still being progressed. For example it is yet to be determined which of these would be better served by local studies and which could be managed nationally. The potential introduction of LEZs is clearly of major significance to a range of stakeholders including fleet operators, local businesses, local communities and the public and involvement at an early stage is essential. Again the need for stakeholder involvement is recognised by CAFS and initial involvement with third parties such as bus operators and has already commenced at a national level.
- 3.5.4 Further updates will be provided to the Council once outputs from the model scenario testing are available and the assessment process is established. The AWPR will reduce the traffic flow and pollution levels on some streets within the AQMAs. Following a successful Scottish Government grant application, the Council has been awarded £25k in the 2017-18 financial year to undertake additional traffic counts on key routes and update of the air quality model once the AWPR is operational.

### **4. FINANCIAL IMPLICATIONS**

- 4.1 There are no financial implications arising from the initial feasibility study actions using the air quality model other than staff time which can be met from existing resources. Potential other work streams including any health or economic appraisal, Business Case or stakeholder consultation process would require significant financial and staffing resources that cannot be met from existing Council budgets. These matters are being considered nationally by the CAFS working group. The role of local authorities in undertaking specific work streams and the support required is still under consideration. Transport Scotland is co-ordinating an assessment of potential costs to develop the infrastructure and enforcement regime for potential low emission schemes and will report on these costs to Scottish Ministers.
- 4.2 The economic impact of a low emission scheme, if implemented, could be significant depending on the nature of the scheme, location and vehicle classifications and will be assessed during the appraisal process. Estimated costs to develop a LEZ and provide the necessary infrastructure are £10M-£20M based on studies elsewhere in the UK. Further information on financial implications and the impact on services will also be reported to the Council in future reports. The potential economic impact on bus operators, haulage companies, business and the public would also require consideration.

## 5. LEGAL IMPLICATIONS

- 5.1 There are no legal implications in undertaking a low emission feasibility study. The legal implications of setting up and enforcing low emission zones in Scotland is likely to require new legislation and is being considered nationally by Transport Scotland and partners organisations. Legal implications to Aberdeen City Council will be dependent on whether a formally adopted low emission zone is adopted and the nature of any such enforcement regime. Further information on the legal implications will be reported to the Council should the feasibility study recommend the introduction of a low emission zone in Aberdeen. If Aberdeen is not adopted as a LEZ, Aberdeen City Council will still have a duty to meet the air quality objectives through the implementation of the Air Quality Action Plan 2011 and other Council initiatives such as the City Centre Master Plan.

## 6. MANAGEMENT OF RISK

- **Financial**

There are no financial risks associated with the feasibility study. Financial risks may arise should the Scottish Government recommend the implementation of a LEZ in Aberdeen. These risks would be determined by the nature, size and location of the LEZ and enforcement regime and cannot be currently quantified; however, the Scottish Government is committed to providing the resources it considers necessary to meet EU legal obligations to comply with the air quality objectives.

Risk: Low

- **Employee**

Initial stages of the feasibility study can be accommodated by existing staff resources and risks are low. Complex economic, health and Strategic Assessment Guidance assessments would require additional resources. Transport Scotland and partner organisations are assessing the potential local authority resource required and delivery options. Risks are generally low provided the Scottish Government and partner organisations provide the necessary personnel/consultant resource to manage the process, however Council employee involvement will still be necessary to direct and support any project.

Risk: Medium

- **Customer/citizen**

There are no risks associated with the feasibility study. Potential risks to citizens could arise should it be necessary to introduce a LEZ that includes restrictions on older diesel cars. The management of these risks would be considered during a public consultation process.

Risk: Low

- **Environment**

There are no environmental risks. Measures to improve air quality will provide wider environmental benefits through reduced CO2 emissions and reduced damage to vegetation and ecosystems.

Risk: Low

- **Technology**

The air quality model to support the feasibility process is via established technology and the risk of system failure is low. Potential technology risks could arise should a camera based enforcement regime be implemented. These risks will be specified in future reports should a LEZ be introduced.

Risk: Low

- **Legal**  
Member states have a legal duty to comply with EU air quality objectives. . The Scottish Government may introduce new legislation to enable the re-allocation of fines; however the risk is low if local authorities implement measures to improve air quality.  
Risk: Low
- **Reputational**  
There are no risks associated with the feasibility study.  
Risk: Low

## **7. IMPACT SECTION**

**7.1** There are no direct impacts from undertaking a low emission feasibility study. Although the focus of a LEZ is to reduce pollutants that are harmful to health, the upgrade of vehicle fleets would potentially also reduce CO2 emissions and support Empowering Aberdeen.

### **7.2 Economy**

**7.2.1** There are no direct economic impacts from undertaking a low emission feasibility study. The adoption of a low emission zone, if recommended by the feasibility study, would support the local economy by potentially reducing traffic and providing a more attractive environment to live, work and visit. However, the potential economic impact on haulage companies, bus operators and other businesses that could be adversely effected would require consideration.

### **7.3 People**

**7.3.1** There are no impacts on people from undertaking a low emission feasibility study. The adoption of a low emission zone and associated air quality improvements would provide short and long term health benefits to people living in Aberdeen. Improved air quality provides greatest benefit to vulnerable people, particularly the elderly, young children and those who already suffer pulmonary or cardiovascular illness. A public consultation process will be undertaken should a low emission zone be recommended.

### **7.4 Place**

**7.4.1** Improved air quality provides a more attractive environment to invest, live and visit. Depending on the location and vehicle classifications included, a LEZ has the potential to reduce vehicle numbers and congestion, complementing the objectives of the City Centre Masterplan and Smarter Cities to provide a people friendly City Centre.

### **7.5 Technology**

**7.5.1** The air quality model will enhance pollution information available across the city and enable the assessment of air quality impacts of proposed road infrastructure or planning developments. Transport Scotland is also exploring methodologies that could be used to link air quality and traffic models to enable the impact of traffic displacement from LEZs to be assessed as part of the feasibility study process.

**8. BACKGROUND PAPERS**

Cleaner Air For Scotland – the Road to a Healthier Future, Scottish Government, 2015 ([www.scottishairquality.co.uk/air-quality/CAFS](http://www.scottishairquality.co.uk/air-quality/CAFS))

Aberdeen City Council Air Quality Progress Report 2016

Aberdeen City Council Air Quality Action Plan 2011

**9. APPENDICES (if applicable)**

None

**10. REPORT AUTHOR DETAILS**

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## Appendix 1 Map of Air Quality Management Areas

