

# **Aberdeen Low Emission Zone**

## **SCREENING REPORT**

## STEP 1 – DETAILS OF THE PLAN

**Responsible Authority:**

Aberdeen City Council

**Title of the plan:**

Aberdeen Low Emission Zone (LEZ)

**What prompted the plan:**

(e.g. a legislative, regulatory or administrative provision)

The key policy and legislative drivers for Low Emission Zones are:

- Transport (Scotland) Act 2019;
- Environment Act 2005;
- Air Quality (Scotland) Regulations 2000 and Air Quality (Scotland) Amendment Regulations 2016
- European Ambient Air Quality Directive (2008/50/EC) and Air Quality Standards (Scotland) Regulations 2010.

[box3](#)

**Plan subject:**

(e.g. transport)

Transport, Environment and Air Quality [box4](#)

**Screening** is required by the Environmental Assessment (Scotland) Act 2005.

Based on Boxes 3 and 4, our view is that:



**An SEA is required, as the environmental effects are likely to be significant:** Please indicate below what Section of the 2005 Act this plan falls within

Section 5(3)



Section 5(4)



**An SEA is not required, as the environmental effects are unlikely to be significant:** Please indicate below what Section of the 2005 Act this plan falls within

Section 5(3)

Section 5(4)

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**Date:**

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## STEP 2 – CONTEXT AND DESCRIPTION OF THE PLAN

## Context of the Plan:

### A Low Emission Zone for Aberdeen

In September 2017, the Scottish Government, in their [Programme for Government](#), committed to the introduction of Low Emission Zones (LEZs) into Scotland's four biggest cities (Glasgow, Edinburgh, Aberdeen and Dundee) by 2020.

Although the timescales for the delivery and enforcement of a LEZ in Aberdeen have been adjusted due to the impact of the Covid-19 pandemic, the Scottish Government and Aberdeen City Council (ACC) are still committed to introducing a LEZ in the city at the earliest opportunity.

An LEZ is a scheme under which individuals driving vehicles which fail to meet specified emission standards will be prohibited from driving those vehicles in contravention of the terms of the scheme as proposed by a local authority within a designated geographical area.

Low Emission Zones are included in the [Transport \(Scotland\) Act](#) which received Royal Assent in November 2019. The Act provides the legislative framework for Scottish local authorities to design, establish and operate nationally consistent LEZs. It allows the Scottish Government to set consistent national standards for key aspects including emissions, penalties, exemptions and parameters for grace periods. Local authorities will then have the powers to create, enforce, operate or revoke an LEZ in their areas and to design the shape, size and vehicle scope of their low emission zone.

Aberdeen City Council is currently planning for the introduction of a LEZ (the Plan) and this SEA screening report will detail the expected environmental impact of the Plan.

#### Policy Context

Activities relating to monitoring and management of air quality in Scotland are primarily driven by European (EU) legislation. It is therefore important that the SEA for Aberdeen's LEZ includes a review of EU legislation and its influence on UK and Scottish air quality policy. A review of Scottish air quality legislation and regulations will set out the specific context in which the delivery of Aberdeen's Low Emission Zone will be delivered.

There are also many related national, regional and local policies and strategies that can influence and be influenced by, the delivery of Aberdeen's Low Emission Zone. Many of these policies and strategies are focused on transportation issues, and may help contribute to overall improvements in air quality in the Aberdeen city centre AQMA. Similarly, it is crucial that local plans and policies (e.g. Development Plans, Economic Strategies) are informed by the LEZ to ensure they continue to drive improvements in air quality.

A full policy review has been undertaken in the National Low Emission Framework (NLEF) Interim Stage 2 Report (SYSTRA, June 2020) that identified LEZ options for detailed model testing and public and stakeholder consultation. The current NLEF process is described below.

A review will be undertaken prior to completion of the SEA to inform the final

Plan. This will include the following:

- Air Quality Legislation
  - Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) Clean Air Programme for Europe (COM(2013)918)
  - National Emissions Ceiling Directive (2016/2284/EU)
  - The Environment Act 1995: Part IV
  - The Air Quality Strategy for England, Scotland, Wales and Northern
  - Air Quality Standards (Scotland) Regulations 2010
  - Air Quality (Scotland) Regulations 2000
  - Air Quality (Scotland) Amendment Regulations 2002
  - Air Quality (Scotland) Amendment Regulations 2016
  - Cleaner Air for Scotland – The Road to a Healthier Future (CAFS)
  - National Low Emission Framework
  - National Modelling Framework
  - Transport (Scotland) Act 2019
- National Plans and Policies
  - National Planning Framework 3
  - National Transport Strategy 2
  - Strategic Transport Projects Review (STPR & STPR2)
- Regional Plans and Policies
  - Aberdeen City and Shire Strategic Development Plan
  - Aberdeen City Region Deal
  - Nestrans Regional Transport Strategy 2013–2035 Refresh
  - Nestrans Freight Action Plan 2014 / Freight Distribution Strategy 2018
- Local Plans and Policies and Projects
  - Aberdeen Local Transport Strategy (LTS) 2016-2021
  - Aberdeen City Centre Masterplan (CCMP)
  - North East Scotland Roads Hierarchy Study
  - Aberdeen Sustainable Urban Mobility Plan (SUMP)
  - Aberdeen City Centre Microsimulation Model (Paramics)
  - Aberdeen Sub Area Model (ASAM)
  - Aberdeen Air Quality Model (National Modelling Framework)

### **Air Quality in Aberdeen**

The [Environment Act 1995](#) , requires all local authorities in the UK the statutory duty to undertake an air quality assessment within their area and determine whether they are likely to meet the air quality objectives for a number of pollutants. The process of review and assessment of air quality undertaken by local authorities is set out under the Local Air Quality Management (LAQM) regime.

Where the results of the review and assessment process highlight problems in meeting the objectives for air quality, the authority is required to declare an Air

Quality Management Area (AQMA). Following the declaration of an AQMA, the local authority is then required to produce an Air Quality Action Plan (AQAP) which sets out measures that the local authority will implement to work towards to achieve air quality objectives.

In 2001 ACC declared part of the City Centre (Union Street and Market Street) an Air Quality Management Area (AQMA) due to predicted exceedances of the annual mean national air quality objective for nitrogen dioxide (NO<sub>2</sub>). The AQMA was extended in 2003 to include adjoining roads. In 2004, the Detailed Assessment indicated potential exceedances of the annual mean objective for particulate matter (PM<sub>10</sub>) and an AQMA was declared for PM<sub>10</sub> covering the same area. In 2005 the AQMA for NO<sub>2</sub> and PM<sub>10</sub> was further extended to include additional adjoining city centre roads. Two further AMQAs were declared in 2008, again due to exceedances of the NO<sub>2</sub> and PM<sub>10</sub> annual mean objectives, for the Anderson Drive/Haudagain roundabout/Auchmill Road corridor and the Wellington Road corridor (Queen Elizabeth Bridge/Balnagask Road), the latter also including the 24 hour mean objective for PM<sub>10</sub>. The City Centre AQMA and the Anderson Drive AQMA were further amended in 2018.

The AQAP provide the mechanism by which local authorities, in collaboration with national agencies and others, will state their intentions for working towards the air quality objectives using the powers they have available. ACC's AQAP includes a series of measures that they will introduce in pursuit of the Air Quality Standards (AQS). The principal aim of the AQAP is to minimise the effects of air pollution on human health within the local authority area using all reasonable measures, within reasonable time frames, and by working towards achieving the AQS.

Despite improvements in air quality since the introduction of the AQAP, there are several locations in the City Centre AQMA where exceedances of emissions exist and where the AQS are not being met. The [2020 Air Quality Annual Progress Report \(APR\) for Aberdeen City Council](#), contains the latest information on air quality problems in Aberdeen that this plan will look to address. The LEZ (this plan) is being introduced to achieve compliance with the standard.

### **National Low Emission Framework**

As stated in the Scottish Government guidance, published January 2019, The [National Low Emission Framework](#) (NLEF) is *an air quality-focused, evidence-based appraisal process developed to help local authorities consider transport related actions to improve local air quality, where transport is identified as the key contributor to air quality problems* (NLEF, 2019).

The NLEF supports and builds on the work already being done through the LAQM system and local authorities in Scotland should have regard to NLEF when undertaking their local air quality management duties, as required under the Environment Act 1995.

The primary aim of the NLEF is to improve local air quality in areas where Scottish Air Quality Objectives (AQOs) are exceeded, or likely to be exceeded, and transport is identified as the key contributor.

The NLEF appraisal process provides a consistent approach to inform decisions on transport-related actions to improve local air quality. It supports local authorities in considering transport-related issues in the context of local air quality management and help develop evidence to support consideration of the introduction of an LEZ as an appropriate option to improve air quality.

NLEF is a two-stage process consisting of Stage 1 Screening and Stage 2 Assessment

The NLEF Stage 1 screening should review Aberdeen's Local Air Quality Management and build an evidence base to assist in the decision of whether a LEZ is appropriate for an Air Quality Management Area (AQMA) and subsequently inform the appraisal and implementation of Aberdeen's LEZ through the Stage 2 Assessment process. Transport Scotland advised ACC that NLEF Stage 1 was not formally required as Aberdeen are committed to delivering a LEZ for the city as a result of the Programme for Government commitment.

While no formal screening has taken place, the key stage of compiling the evidence base to support the LEZ option development and appraisal has been undertaken. It is crucial to understand existing air quality in Aberdeen and to review all relevant regional and local plans, policies and strategies that may influence or be influenced by a LEZ in Aberdeen. This evidence base and policy review formed the first part of this NLEF Stage Assessment.

NLEF Guidance describes the following key steps that should be undertaken as part of the Stage 2 Assessment:

1. Define the objectives for the potential LEZ
2. Assess the impact of potential LEZ options with regard to air quality using the National Modelling Framework Aberdeen City Model
3. Identify the preferred option, including consideration of geographical extent and scope of vehicles to be included
4. Stakeholder input and consultation
5. Consider the wider impacts of the preferred option (e.g. traffic and air quality modelling, Strategic Environmental Assessment, Equality Impact Assessment)

In June 2020, SYSTRA completed an ***Interim NLEF Stage 2 Assessment Report***. The report detailed the identification of the LEZ objectives and the preferred LEZ options (steps 1-3) to be presented for consultation (step 4) and detailed model testing (step 5).

Online public consultation and stakeholder workshops on the potential LEZ options identified through the NLEF process are being undertaken in September and October 2020 (currently at the time of writing this SEA Screening Report). Concurrent to this, Systra and SEPA are continuing with detailed traffic and air quality modelling of the proposed options.

Both the consultation and modelling exercises will feed into a final NLEF Stage 2

	<p>Assessment to identify in the preferred LEZ option for Aberdeen.</p>
<p><b>Description of the Plan:</b></p>	<p>The Plan is the implementation of a Low Emission Zone in Aberdeen.</p> <p>Low emission zones are included in the Transport (Scotland) Act 2019. The Act provides the legislative framework for Scottish local authorities to design, establish and operate nationally consistent LEZs. It allows the Scottish Government to set consistent national standards for key aspects including emissions, penalties, exemptions and parameters for grace periods.</p> <p>Local authorities will design each low emission zone based on their specific, local requirements. The Act gives local authorities the powers to create, enforce, operate or revoke a low emission zone in their area and to design the shape, size and vehicle scope of individual low emission zones.</p> <p>It is proposed that:</p> <ul style="list-style-type: none"> <li>○ low emission zone entry will still be based on the Euro emission engine classification standards</li> <li>○ low emission zones operate continuously, 24 hours a day, seven days a week, all year round</li> <li>○ enforcement will utilise Automatic Number Plate Recognition (ANPR) cameras, linked to a national vehicle licencing database, to monitor vehicles entering a low emission zone to detect vehicles which do not comply with the minimum Euro emission standards</li> <li>○ low emission zones will be based on a penalty notice approach to discourage non-compliant vehicles from entering the zone</li> <li>○ the design, implementation and operation of low emission zones will involve grace periods to allow commercial fleet operators and private vehicle owners time to prepare</li> <li>○ exemptions will be specified in regulations</li> <li>○ local authorities publish a report annually on the effectiveness of low emission zones.</li> </ul> <p>Aberdeen City Council is in the early stages of planning for the introduction of an LEZ and has followed the NLEF guidance to develop suitable LEZ options for the city. The suitability of these options is currently being investigated through detailed traffic and air quality modelling.</p>
<p><b>What are the key components of the plan?</b></p>	<p>There is ultimately only one key component of the plan, the delivery of Aberdeen’s Low Emission Zone, which will be subject of this SEA.</p>

**Have any of the components of the plan been considered in previous SEA work?**

The legislative and policy context and the appraisal tools used to deliver the plan (e.g. Transport (Scotland) Act and NLEF) have been independently subject to SEA.

**In terms of your response to Boxes 7 and 8 above, set out those components of the plan that are likely to require screening:**

Delivery of Aberdeen's Low Emission Zone

**STEP 3 – IDENTIFYING INTERACTIONS OF THE PLAN WITH THE ENVIRONMENT AND  
CONSIDERING THE LIKELY SIGNIFICANCE OF ANY INTERACTIONS**

Plan Components	Environmental Topic Areas										Explanation of Potential Environmental Effects	Explanation of Significance
	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air	Climatic factors	Material assets	Cultural heritage	Landscape	Inter-relationship issues		
Delivery of Aberdeen's Low Emissions Zone	✗	✓	✗	✗	✓	✓	✓	✗	✗	✗	<p>The delivery of Aberdeen's Low Emission Zone will set an area of certain road spaces within the city, allowing only vehicles of suitable emissions standards to enter the LEZ. Introducing the LEZ will aim to reduce vehicular emissions in the zone and therefore have an impact upon <b>Population and Human Health, Air, Climatic Factors and Material Assets</b>.</p>	<p>It is expected that the delivery of the Low Emission Zone will have a positive impact on Population and Human Health, Air, Climatic Factors and Material Assets. As the Plan develops, the significance of this positive benefit will be established. At this stage of the Plan development, it is considered that delivery of the LEZ in Aberdeen will have a significant positive impact.</p> <p>Full details of this impact is provided in Step 4 below</p>

## STEP 4 – STATEMENT OF THE FINDINGS OF THE SCREENING

### Summary of interactions with the environment and statement of the findings of the Screening:

(Including an outline of the likely significance of any interactions, positive or negative, and explanation of conclusion of the screening exercise.)

The Plan will deliver a Low Emission Zone in Aberdeen. Aberdeen City Council, and its consultants SYSTRA, are following the NLEF guidance to identify a final LEZ option for the city, both in terms of area and vehicle types covered by the LEZ. An Interim NLEF Stage 2 Assessment Report was published in June 2020 and detailed the identification of the LEZ objectives and eight possible LEZ options.

Online public consultation and stakeholder workshops on the potential LEZ options identified through the NLEF process are being undertaken in September and October 2020 (currently at the time of writing this SEA Screening Report). Concurrent to this, SYSTRA and SEPA are continuing with detailed traffic and air quality modelling of the proposed options. Both the consultation and modelling exercises will feed into a final NLEF Stage 2 Assessment to identify in the preferred LEZ option for Aberdeen. For the purposes of this SEA Screening Report, it is proposed that:

- low emission zone entry will be based on the Euro emission engine classification standards
- low emission zones operate continuously, 24 hours a day, seven days a week, all year-round enforcement will utilise Automatic Number Plate
- Recognition (ANPR) cameras, linked to a national vehicle licencing database, to monitor vehicles entering a low emission zone to detect vehicles which do not comply with the minimum Euro emission standards
- low emission zones will be based on a penalty notice approach to discourage non-compliant vehicles from entering the zone
- the design, implementation and operation of low emission zones will involve grace periods to allow commercial fleet operators and private vehicle owners time to prepare
- exemptions will be specified in regulations
- local authorities publish a report annually on the effectiveness of low emission zones.

It is expected that the delivery of the Aberdeen's Low Emission Zone will have a positive impact on Population and Human Health, Air, Climatic Factors and Material Assets. As the final Plan develops, the significance of this positive benefit will be established. At this stage of the Plan development, the significance of the expected positive impact is detailed using the Screening Criteria set out in in [Schedule 2](#) of the 2005 Environmental Act (and as detailed in Section 3.3 of the SEA guidance)

#### 1. The characteristics of the plan

*1(a) the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources*

The LEZ does not set a framework but will provide the direction for improving air quality. The LEZ will enhance the existing legislative provisions and provide a tool to assist local authorities in developing appropriate actions to fulfil their duties under the air quality objectives. It is therefore likely that the plan will result in overall environmental benefits (for Population and Human Health, Air, Climatic Factors and Material Assets).

*1(b) the degree to which the plan influences other plans including those in a hierarchy*

The LEZ will aim to align existing policies with the aim to deliver improvements to air quality. The LEZ may influence future policies and strategies at local level. The LEZ may directly influence the objectives for other air quality, sustainable development, transport, active transport, development and land use planning and climate change policies for Aberdeen City Council. This approach should result in overall environmental improvements (for Population and Human Health, Air, Climatic Factors and Material Assets ) however the level of significance and influence is dependent on other plans and policies put forward by Aberdeen City Council

*1(c) the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development*

The LEZ may influence decisions on a range of activities, including the planning and development process, transport strategies and energy, with the overall aim of contributing to sustainable economic growth in Aberdeen, whilst taking in to account air quality issues.

*1(d) environmental problems relevant to the plan*

Emissions from road transport are now considered the main source of urban air pollution, and an AQMA in Aberdeen city centre was first declared in 2001. Following the declaration of the AQMA, ACC published an Air Quality Action Plan (AQAP).

The AQAP includes a series of measures that ACC will introduce in pursuit of the Air Quality Standards (AQS) objectives. The principal aim of the AQAP is to minimise the effects of air pollution on human health within the local authority area using all reasonable measures, within reasonable time frames, and by working towards achieving the AQS objectives. Despite improvements in air quality since the introduction of the AQAP, there are several locations in the AQMA where exceedances of emissions exist. The [2020 Air Quality Annual Progress Report \(APR\) for Aberdeen City Council](#), contains the latest information on existing environmental problems (in relation to air quality) in Aberdeen that this plan will look to address.

The plan may also provide a mechanism for introducing further measures that can be implemented in order to achieve national air quality standards and objectives for protecting human health and the environment.

*1(e) the relevance of the plan for the implementation of European Community*

*legislation on the environment (for example, plan linked to waste management or water protection)*

The LEZ has direct relevance to EU Directive 2008/50/EC – Ambient Air Quality and Cleaner Air for Europe (CAFE) - by helping Aberdeen achieve the Scottish air quality legislation, ultimately derived from CAFE. The overall objectives of the LEZ, may also deliver of a wider range of EU Directives, including: EU Climate Change Programme, EU Sustainable Development Strategy and international Conventions and Protocols on transboundary pollutants.

## **2. The characteristics of the effects and the area likely to be affected**

### *2 (a) the probability, duration, frequency and reversibility of the effects*

The aim of the LEZ is to improve air quality and reduce vehicle emissions in Aberdeen. The plan will provide the legislative mechanism for implementing long-term measures for improving air quality. While it is anticipated that Aberdeen's LEZ will provide significant beneficial impacts for Population and Human Health, Air, Climatic Factors and Material Assets the probability, duration and frequency of these effects are difficult to ascertain and may only be quantified either upon implementation or through continual monitoring of the actions generated.

### *2 (b) the cumulative nature of the effects*

The LEZ will align with existing plans, policies and strategies and aims to improve air quality in Aberdeen. The implementation of the LEZ will have an overall positive and cumulative effect on air quality, human health and the environment across Aberdeen, particularly inside the final LEZ area. On its own, the effects of the LEZ are expected to have considerable significant impacts on the environment and, further to this, the LEZ may have additional cumulative effects through its influence on other air quality, sustainable development, transport, active transport, development and land use planning and climate change policies for Aberdeen City Council

### *2 (c) transboundary nature of the effects (on another EU member state)*

The focus for the LEZ is the city of Aberdeen and therefore the effects on another EU member state would not be considered relevant for the purpose of undertaking a strategic environmental assessment.

### *2 (d) the risks to human health or the environment (for example, due to accidents)*

The overall aim of the LEZ is to improve air quality in Aberdeen, which will improve both human health and the environment. Measures that will be set out within the plan will include measures to enhance the environment as well as direct emission reduction measures. The LEZ will align other plans, policies and strategies in order to promote the adoption of the air quality measures and may influence on other air quality, sustainable development, transport, active transport, development and land use planning and climate change policies for Aberdeen City Council. Such effects and influence would not be considered to have significant impact or risk to human health for the purpose of undertaking a strategic environmental assessment

### *2 (e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be*

*affected)*

This is a local strategy that will provide the measures to implement actions at a local scale in the Aberdeen local authority area. The plan will therefore only have measurable effects at the local scale. Although the exact area considered inside the LEZ is yet to be determined it is expected that the impacts on air quality, human health and the environment in the LEZ area to be significant. There is also likely to be some effect on areas immediately outside the defined LEZ area due to the possible influence of the plan on trip making, volume and distribution.

*2 (f) the value and vulnerability of the area likely to be affected due to-*

*(i) special natural characteristics or cultural heritage;*

*(ii) exceeded environmental quality standards or limit values; or*

*(iii) intensive land-use.*

i) Through the implemented measures for improving air quality and reducing emissions there may be associated improvements to natural habitats, however this is not likely to be particularly relevant in Aberdeen city. If there are improvements, these would primarily come about by the contribution made in reducing the level of atmospheric pollutants and therefore reducing the rate of deposition on such habitats. Improvements in urban air quality will have benefits to the built environment, in particular those buildings with cultural and historical importance. However, the extent of reduction and improvements directly associated with the LEZ will not be considered significant to merit a full strategic environmental assessment.

ii) The objectives of the LEZ is to ensure further improvements in air quality and therefore the primary outcome from the plan will be for Aberdeen to meet exceedance limits across the city.

iii) The strategy will not directly influence land use, however it will aim to improve the consideration of air quality within the planning and development process, particularly within the LEZ area

*2 (g) the effects on areas or landscapes which have a recognised national, community or international protection status*

The plan is specific for the Aberdeen city centre area where no direct impact on, for example Special Protection Areas (SPAs) and Sites of Special Scientific Interest (SSSIs), is likely to be significant enough to be covered by this plan. There are conservation areas in Aberdeen and it is anticipated that that plan would have a minimal positive effect in these areas, if included in the LEZ area. This benefit however is not considered significant.

When completed send to: [SEA.gateway@scotland.gsi.gov.uk](mailto:SEA.gateway@scotland.gsi.gov.uk) or to the SEA Gateway, Scottish Government, Area 2H (South), Victoria Quay, Edinburgh, EH6 6QQ.