

Integrated Impact Assessment Summary Report

January 2024

1. Title of proposal

Air Quality Action Plan

2. What will change as a result of this proposal?

The Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Edinburgh between 2023 and 2028.

This AQAP replaces the previous Action Plan which ran from 2008 and updated in 2010, making good progress in improving air quality across the city, alongside regional and national changes and developments. Even without the effect of the Covid-19 pandemic, long term trends show concentrations of the main pollutants are decreasing at most locations across the city, albeit there remain hot spot areas where statutory objectives are being exceeded, in particular traffic related nitrogen dioxide (NO₂) in the City Centre. The revised plan sets out how the Council and its partners will continue to build on the progress made on improving air quality in Edinburgh with the aim of meeting and maintaining the statutory objectives for the main pollutants and the revocation of the city's Air Quality Management Areas.

For this new AQAP actions have been developed that can be considered under eight broad themes:

- Low Emission Zone (LEZ)
- Strategic Transport
- Behavioural Change to Active Travel
- Public Transport
- Low Emission Vehicles
- 2030 Climate Strategy
- Integrated Policies and Guidance
- Domestic Solid Fuel Burning

The Council's priorities include the delivery of the LEZ, however the AQAP will also deal with the residual exceedances where the LEZ may not achieve compliance with statutory air quality objectives over the next few years. Wider, more strategic measures have also been included to reduce emissions of Nitrogen Oxides (NO_x) and Particulate Matter (PM₁₀ and PM_{2.5}) across the city,

It is generally accepted that air pollution can be harmful to all. Significant improvements in air quality will result in improved public health, but particularly for those who are most

vulnerable to the effects of air pollution such as children, older people and those with existing medical conditions, especially related to the heart and lungs.

3. Briefly describe public involvement in this proposal to date and planned

One of the main actions in the Air Quality Action Plan is the delivery of the Low Emission Zone (LEZ) for Edinburgh, which was implemented in May 2022. The process of developing the LEZ included a number of phases of public consultation where it was possible to gauge public opinion regarding the LEZ and air quality matters in general.

The Council ran an initial consultation from 27th May to 21st July 2019 which focused on the proposed LEZ boundaries, vehicle types, grace periods and any unintended consequences. The findings showed there were mixed views as to the suitability of the LEZ and to its specific aspects, however that cleaner air is important to all who responded. For everyone, vital questions to consider were the cost of LEZ compliance to them; the cost to life in Edinburgh (clean air, goods/services); and looking at a bigger, city and regional picture to tackle underlying issues (traffic flow, public transport, etc).

Over a 12-week period between 28th June and 20th September 2021 a further public consultation was undertaken on a statutory basis. In generally, consultees were in favour of action to improve air quality across Edinburgh but overall did not reach consensus on the scale to which the proposals should extend. Concerns centred on the costs to adapt, especially in the wake of the COVID-19 pandemic, potential localised displacement impacts around the LEZ boundary and whether proposals would improve air quality beyond the boundary and support modal shift.

A consultation was undertaken on a draft Air Quality Action Plan (AQAP), which was extensive and wide ranging, considering it was integrated with a wider consultation for the City Mobility Plan, as well as having its own statutory process. The citywide consultation sought views on five draft action plans (Active Travel, Public Transport, Road Safety, Parking, and Air Quality) and the emerging Our Future Streets (Circulation Plan) and was undertaken over a 12-week period from 17 April until 9 July 2023.

Consultation activities were structured predominantly around stakeholder discussions including in-person workshops, market research, but also a public online survey, public drop-in events, focus groups capturing seldom heard and underrepresented groups.

4. Is the proposal considered strategic under the Fairer Scotland Duty?

No

5. Date of IIA (workshop)

21st September 2022

6. Who was present at the IIA? Identify facilitator, lead officer, report writer and any employee representative present and main stakeholder (e.g., Council, NHS)

Name	Job Title (Council Team)	Date of IIA training
Emma Mayes (Facilitator)	Environmental Health Officer (Place, Environment and Heritage)	29 Apr 2021
Shauna Clarke (Lead officer)	Environmental Health Officer (Place, Environment and Heritage)	10 Sep 2020
Ciaran Davidson (Report writer)	Student Planning Officer (City Plan Development team)	07 Sep 2022
Suzanne Hunter	Transport Officer (Road Safety, Transport)	01 Nov 2018
Greg McDougall	Transport Officer (Place, Environment and Heritage)	
Gareth Dixon	Senior Policy & Insight Officer (City Strategies)	
Ann Connolly	Environmental Health Officer (Environmental Protection)	

7. Evidence available at the time of the IIA

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
Data on populations in need	<p>Edinburgh By Numbers 2021: Edinburgh by Numbers – The City of Edinburgh Council</p> <p>The National Records of Scotland Mid-year estimates 2019, 2020 & 2021 Mid-Year Population Estimates National Records of Scotland (nrscotland.gov.uk)</p> <p>City of Edinburgh Council Area Profile (nrscotland.gov.uk)</p>	<p>Edinburgh has one of the fastest growing populations of any city in the UK. In the ten years to 2020, Edinburgh’s population grew by 12.3% from an estimated 469,930 to an estimated 527,620 people. In the same time period Scotland grew by 3.9%.</p> <p>The population of those age groups most vulnerable to the effects of air pollution, children (0-15) and older people (65+), grew by 11.1% and 17% respectively.</p> <p>By 2043 the proportion of these age groups (0-15 and 65+) will represent almost half of the population in Edinburgh (to 47.6%).</p>

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
	<p>Census 2011 Search Scotland's Census (scotlandscensus.gov.uk)</p> <p>Scottish Index for Multiple Deprivation (SIMD) https://simd.scot/</p> <p>Edinburgh School Catchment Zones https://www.edinburgh.gov.uk/catchmentmap</p>	<p>By 2032, the average household size in Edinburgh is projected to fall leading to an increase in the number of households.</p> <p>Based on 2011 Census Data the wards with the highest number of long-term health conditions (including deafness, blindness, physical, mental health, learning disabilities etc.) are Portobello/Craigmillar, Liberton/Gilmerton and Leith Walk which each had 31% of their total reporting health conditions. The City Centre had the lowest proportion (22%).</p> <p>As shown by the school catchment zones for Edinburgh, numerous primary schools have students that live on or close to an AQMA or must travel through an area to get to school. This trend continues when looking at High School catchments, where numerous schools cover the area of multiple AQMAs along with Catholic schools that constitute a wide catchment across varied areas of the city.</p>
Data on service uptake / access	<p>Population Density Maps https://www.edinburgh.gov.uk/downloads/file/24263/population-distribution-and-density</p> <p>Edinburgh Tram York Place to Newhaven Project https://www.edinburgh.gov.uk/tramstonewhaven/downloads/file/66/final-business-case</p> <p>Edinburgh LEZ https://www.edinburgh.gov.uk/lowemissionzone</p>	<p>Due to most of the AQMA areas being around the most densely populated and frequently visited areas of the city, many residents will be directly affected by the implementation of the Action Plan and its benefits.</p> <p>Part of the City's transport plans has been to the expand and increase the Edinburgh tram system. This expansion not only alleviates unsustainable and unhealthy transport methods in the central area, but also across the tram network, that includes the area west of the city and towards the airport, Leith and potentially in the future, south Edinburgh.</p> <p>The LEZ (Low Emissions Zone) is the most direct method of addressing the Air Quality issues, specifically within the city centre.</p>

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
	<p>City Plan 2030 https://www.edinburgh.gov.uk/downloads/file/29997/proposed-plan-written-statement</p>	<p>This is the location wherein most people of Edinburgh will experience the impacts of poor air quality, and hence is most viable as the location for this enforcement.</p> <p>City Plan 2030s objectives for transport involve the expansion of active travel, public transport, as well as a reduction in car emissions and usage. These are citywide, and are closely integrated with the goals and methods for the AQAP, and hence are of notable impact to most residents of the city</p>
<p>Data on socio-economic disadvantaged e.g., low income, low wealth, material deprivation, area deprivation.</p>	<p>Scottish Index for Multiple Deprivation (SIMD) https://simd.scot/</p> <p>City Mobility Plan https://www.edinburgh.gov.uk/downloads/file/29320/city-mobility-plan-2021-2030</p> <p>The Edinburgh Poverty Commission’s data and evidence paper https://edinburghpovertycommission.org.uk/wp-content/uploads/2020/09/20200930_Poverty_in_Edinburgh-Data_and_evidence.pdf</p> <p>Transport and Travel in Scotland 2019: Results from the Scottish Household Survey https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-2019-results-from-the-scottish-household-survey/</p> <p>Edinburgh Travel Behaviour Study 2019</p>	<p>Some of the areas of high deprivation as ranked by the SIMD such as Wester Hailes, Muirhouse and Granton have low level of access to public transport and no access to a private car.</p> <p>The most deprived communities are mainly located in the peripheral areas of the city (e.g., Granton, Pilton, Niddrie, Saughton and Wester Hailes), which are not specifically Air Quality Management Areas (AQMAs). However, in addition, areas within the Great Junction Street and Central AQMA (Old Town, Cowgate) are within the 20% most deprived areas in Scotland.</p> <p>Groups with higher rates of poverty are:</p> <ul style="list-style-type: none"> • People from certain BAME backgrounds • Disabled • Families with 3 or more children • People in rented accommodation <p>• Some 74% of all unemployed people in Scotland are in poverty, compared to only 5% of people in households where all adults are in full time work.</p> <p>• 29% of households which rely on part time employment are in poverty, as well as 26% of multiple adult households where only one adult is in full time employment.</p>

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	https://www.edinburgh.gov.uk/downloads/file/30187/edinburgh-travel-behaviour-survey-2019	<p>• Housing costs are estimated to be a contributing factor for 29% of people in poverty in Edinburgh.</p> <p>• Car ownership and access to a bike follow a clear income gradient (higher income having higher access) in urban areas.</p> <p>• Users of public transport tend to be younger (16-29) and older age groups (60+)</p> <p>White Scottish and White British residents are a lot more likely to have a driving licence than ethnic minority groups. Furthermore, men are more likely to hold a licence than women along with the income of households showing a clear trend where lower income households are less likely to drive and less likely to own multiple cars.</p>
Data on equality outcomes	<p>Road-traffic related air pollution: https://www.environment.gov.scot/our-environment/air/air-quality-and-citizen-science</p> <p>Scottish Government Heat Policy impact assessment: https://www.gov.scot/publications/heat-buildings-strategy-equality-impact-assessment/documents/</p> <p>The National Records of Scotland Mid year estimates 2019, 2020 & 2021 Mid-Year Population Estimates National Records of Scotland (nrscotland.gov.uk) City of Edinburgh Council Area Profile (nrscotland.gov.uk)</p>	<p>Road-traffic related air pollution can affect everyone, but especially the most vulnerable – the very young, the elderly and those with pre-existing health conditions; air pollution is often worst in inner city deprived areas, worsening existing inequalities in local environment quality and human health.</p> <p>Groups more at risk of fuel poverty/having high fuel costs are: • single pensioner households • older people, families with young children and people with disabilities (all groups who may spend more time at home).</p>

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
Research / literature evidence	<p>Cleaner Air For Scotland https://www.gov.scot/publications/cleaner-air-scotland-2-towards-better-place-everyone/</p> <p>Imperial College London, Environmental Research Group Publication Investigating Links between air pollution, covid 19 and lower respiratory infectious diseases https://www.imperial.ac.uk/media/imperial-college/medicine/sph/environmental-research-group/ReportfinalAPCOVID19_v10.pdf</p> <p>HPS Website - Air Pollution and Health Briefing Note. Mortality Associated with exposure to fine particulate matter (PM2.5 Attributable Mortality) in Scotland</p> <p>Committee on the Medical Effects of Air Pollutants - Report https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1090376/CO_MEAP-dementia-report-2022.pdf</p> <p>Edinburgh City Centre Transformation https://democracy.edinburgh.gov.uk/documents/s6001/Item%207.1%20-%20ECCT%20Final%20Strategy%20with%20all%20appendices.pdf</p>	<p>There are numerous examples of research and literature that have been used as evidence in identifying the AQMAs and developing the AQAP. These have all been key in gaining statistics and understanding towards the issue and how it can be addressed.</p> <p>Most evidence indicates a clear trend where poor air quality contributes to adverse health impacts, with the EU assessing that 307,000 deaths in 2019, across member states, could be attributed to issues caused by air pollution.</p> <p>Each year in the UK, around 40,000 premature deaths are attributable to exposure to outdoor air pollution which plays a role in many of the major health challenges of our day. Based on modelling, the estimated mortality burden on the population in Scotland in 2010 showed that there were around 2,000 premature deaths and a total of around 22,500 life years lost across the population which can be attributed to anthropogenic (man-made) fine particle pollution. In Edinburgh, this can be related to 205 premature deaths and 2,300 life-years lost.</p> <p>There is an ever-growing evidence base for the connections between air pollution and heart and lung health and premature mortality. Connections are also being made to other conditions such as diabetes, dementia, mental health and negative birth outcomes. Most recently there have been potential links to Covid-19. Diseases caused or worsened by air pollution also lead to increased vulnerability to severe outcomes.</p> <p>Evidence suggests that the most effective solutions to transport-related emissions involve changing transport habits to use of more sustainable and active modes; for</p>

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
	<p>City Mobility Plan https://www.edinburgh.gov.uk/downloads/file/29320/city-mobility-plan-2021-2030</p> <p>Climate Strategy 2030 edinburgh-2030-climate-strategy</p> <p>City Plan 2030 https://www.edinburgh.gov.uk/downloads/file/29997/proposed-plan-written-statement</p> <p>Edinburgh Travel Behaviour Study 2019 https://www.edinburgh.gov.uk/downloads/file/30187/edinburgh-travel-behaviour-survey-2019</p> <p>European Environmental Agency – Air Pollution https://www.eea.europa.eu/themes/air/health-impacts-of-air-pollution</p> <p>Air pollution: how it affects our health — European Environment Agency (europa.eu)</p> <p>Public Health England – Health Matters: Air Pollution https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution</p> <p>Health Protection Scotland HPS Website - Air Pollution and Health Briefing Note. Mortality Associated with exposure to fine particulate matter (PM2.5 Attributable Mortality) in Scotland</p>	<p>example walking, cycling, use of electric vehicles and public transport, as well as regulating car usage and controlling vehicle emission standards within certain areas.</p> <p>According to evidence from 2019, the most frequently used modes of travel (used most days) were: walking (39% walked a whole journey / 32% walked part of a journey most days in the last month), bus (31%) and driving (22%).</p> <p>One hundred and forty health professionals and doctors wrote an open letter to the City Council highlighting the life-saving effects of the active travel measures implemented during the COVID-19 pandemic. The letter emphasised the need to maintain and expand the public accessibility and interest in walking and cycling for public health benefit.</p> <p>A 2017 Defra report on potential air quality impacts of biomass combustion concludes that domestic emissions of wood smoke have an especially high impact on ground-level concentrations relative to those from elevated sources, and if current trends in domestic emissions continue upwards, it is inevitable that there will be an increase in airborne concentrations of wood smoke which will consequently lead to increased population exposure.</p> <p>In terms of environmental impacts, the proposal includes many measures which have clear co-benefits of improved air quality and reduction in GHG emissions. Net-zero measures which would require mitigation to protect air quality if they were to be considered as part of the City’s route to net zero include combustion of biomass (it has the potential to lead to reduced net GHG emissions relative to fossil fuels, but could lead to air pollutant emissions, especially PM2.5, locally); and hydrogen as</p>

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	<p>consultation-2019-summary-of-findings-scott-porter-2019</p> <p>LEZ Report on Public Consultations 2021 https://www.edinburgh.gov.uk/downloads/file/30523/low-emissions-zone-consultation-2021-summary-of-findings-scott-porter-september-2021-</p> <p>Scotland Low Emission Zone Consultation 2019-2020 https://www.transport.gov.scot/media/48575/tscot-lez-consultation-2019-2020-analysis-master-report-v30-final.pdf</p> <p>Connecting Edinburgh Consultation https://consultationhub.edinburgh.gov.uk/sfc/connecting-our-city-transforming-our-places/supporting_documents/Connecting%20our%20City%20Transforming%20our%20Places.pdf</p>	<p>with differing priorities. For all however, vital questions to consider are the cost of LEZ compliance to them; the cost to life in Edinburgh (clean air, goods/services); and looking at a bigger city and regional picture to tackle underlying issues (traffic flow, public transport etc.)</p> <p>The main issues voiced were about increased traffic and pollution in the neighbouring streets/parks; the desire to make the LEZ larger; and to include New Town/up to Ferry Road. Worries were also voiced about the financial effect on businesses and individuals. Comments were mainly about considering exemptions, like motorbikes/scooters, buses/public transport, private cars, deliveries and tradespeople.</p> <p>Twelve percent of those who completed the Council’s online LEZ questionnaire in 2021, said they had a physical or mental health condition or illness lasting or expected to last 12 months or more that limits their daily activities. Of those who stated they did, 17% were Blue Badge holders and 3% own a vehicle with adaptations for disabled users.</p> <p>The 2021 consultation found that support for the LEZ and its details is very mixed, but this appears to have less to do with the principle of being able to breathe better air, and more to do with the practical implications for people within and travelling to the zone, as well as the specific practical details of the proposal. Similar concerns to those in the 2019 consultation were voiced.</p>
Evidence of inclusive engagement of people who use the	As above	Same as above for consensus from the public over the use of this service.

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
service and involvement findings		
Evidence of unmet need		See above -range of evidence on public exposure to unacceptable levels of air pollution
Good practice guidelines	<p>Local Air Quality Management Policy and Technical Guidance, https://www.scottishairquality.scot/laqm/technical-guidance</p> <p>Local Air Quality Management - New Policy Guidance PG(S) (16) https://www.scottishairquality.scot/sites/default/files/publications/2022-08/00534614.pdf</p> <p>Cleaner Air for Scotland 2 https://www.gov.scot/publications/cleaner-air-scotland-2-towards-better-place-everyone/</p>	National air quality guidance and guidelines
Carbon emissions generated / reduced data	<p>Climate Emissions Analysis and 2030 City Sustainability Approach https://democracy.edinburgh.gov.uk/documents/s29297/item%207.3%20-%20Climate%20Emissions%20Analysis%20and%202030%20City%20Sustainability%20Strategy%20Approach.pdf</p> <p>cleaner-air-for-scotland-national-modelling-framework-low-emission-zone-edinburgh-report-addendum-carbon-scottish-</p>	<p>In 2020, the city’s carbon emissions were predominantly made up of transport (31 percent), housing/domestic (29 percent), public and commercial buildings (23 percent), industry (17 percent).</p> <p>It is predicted that there will be a negligible change in total carbon dioxide (CO₂) emissions (0.04% reduction) due to the introduction of the LEZ.</p> <p>The most effective way to reduce CO₂ emissions from transport is to reduce fossil fuel vehicles on the road or replace with non-fossil fuel powered vehicles, which the Council’s wider transport strategy – City Mobility Plan – supports.</p>

Evidence	Available – detail source	Comments: what does the evidence tell you with regard to different groups who may be affected and to the environmental impacts of your proposal
	environment-protection-agency-december-2021-	See above – research literature / evidence.
Environmental data	<p>Scottish Government, Cleaner Air for Scotland: The Road to a Healthier Future, 2015 https://www.gov.scot/publications/cleaner-air-scotland-road-healthier-future/</p> <p>Public Health England, Estimating Local Mortality Burdens associated with Particulate Air Pollution, 2014. https://www.gov.uk/government/publications/estimating-local-mortality-burdens-associated-with-particulate-air-pollution</p> <p>City of Edinburgh Council, Air Quality Annual Progress Report (APR) for City of Edinburgh Council, 2021 https://www.edinburgh.gov.uk/downloads/file/30443/laqm-annual-progress-report-2021</p> <p>SEPA, The Clearer Air for Scotland – National Modelling Framework, Air Quality Evidence Reports– Edinburgh. 2018 & 2021. https://www.edinburgh.gov.uk/downloads/file/30516/cleaner-air-for-scotland-national-modelling-framework-air-quality-evidence-report-edinburgh-scottish-environmental-protection-agency-november-2018</p>	<p>Poor outdoor air quality can result from contamination of the outdoor atmosphere by gaseous and particulate pollutants.</p> <p>Based on modelling, the estimated mortality burden on the population in Scotland in 2010 showed that there were around 2,000 premature deaths and a total of around 22,500 life years lost across the population which can be attributed to anthropogenic (man-made) fine particle pollution. In Edinburgh, this can be related to 205 premature deaths and 2,300 life-years lost.</p> <p>The Scottish Environment Protection Agency (SEPA) provided robust evidence of traffic pollution exceeding accepted levels in Edinburgh</p> <p>Edinburgh has five AQMAs due to exceedances of the statutory NO₂ air quality objectives; the sixth AQMA relates to exceedances of the fine particulates (PM₁₀) air quality objectives. Monitoring of local pollutants to review and assess air quality is undertaken using near real-time analysers at monitoring stations around Edinburgh in different roadside locations (pavement level, lamppost, building façade etc). Road transport is primarily responsible for NO₂ concentrations.</p> <p>The Council’s Air Quality Annual Progress Report in 2021, reported a continuing trend towards compliance with air quality objectives. However, exceedances remained across the city, with the Central AQMA having the highest concentration of sites that have these exceedances.</p>

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	https://www.edinburgh.gov.uk/downloads/file/30519/cleaner-air-for-scotland-%E2%80%93-national-modelling-framework-low-emission-zone-evidence-report-%E2%80%93-edinburgh-scottish-environment-protection-agency-september-2021	
Risk from cumulative impacts	Health Matters UK Government https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution	<p>The aim of the AQAP is to have a positive impact on public health by reducing air pollution, therefore it is assumed that there will not be significant negative outcomes.</p> <p>A concern, as can be seen voiced in the representations to city plan, is the effect of targeted discouragement of car usage and the way it would impact people who rely on private car usage to operate their lives (mainly disabled residents and large families). This concern is valid, but through the entire scope of a successful implementation of the measures proposed in the AQAP and the goals of the 2030 City Plan, the objective is to create a city in which the use of a car should never be essential for any resident, regardless of any physical, social, or economic situation.</p>
Other	N/A	N/A
Additional evidence required	Information gathered from future consultation on the draft Air Quality Action Plan	Statutory consultation process on the draft AQAP will follow.

8. In summary, what impacts were identified, and which groups will they affect?

Equality, Health and Wellbeing and Human Rights	Affected populations
<p>Positive</p> <p>The plan seeks to enhance air quality across Edinburgh and hence has notably positive public health and wellbeing effects for all groups of people. This is the most significant conclusion to the Plan’s implementation.</p> <p>Achieving the aims of the plan would allow for citizens living in or frequently travelling through AQMAs to be able to experience improved levels of air quality. Additionally, a number of the actions in the plan support active travel which is a sustainable and healthy form of transport that also benefits people and the environment.</p> <p>The plan is targeted towards the improvement air quality within the AQMAs, but the scope of the themes and actions within the plan extend towards the whole city. This means that much of the population will be able to experience the benefits of the aspects of the plan and improved air quality, the young and old especially. Most notably through active travel working towards combating obesity and improving health.</p> <p>Measures to support public transport related actions (e.g., Public Transport Action Plan) are intended to provide equitable access to the city for many groups, especially those less likely to own a vehicle and those that live within areas with low transport availability.</p> <p>Supporting the social housing retrofit plans would allow for many with a lower socio-economic status to live in dwellings that have equitable energy standards in comparison to more affluent homes.</p>	<ul style="list-style-type: none"> • All
<p>Negative</p> <p>Any discouragement of domestic solid fuel burning would have the potential to impact specific groups who may use solid fuels as a means of generating heat. Specific groups thought to be possibly impacted are:</p> <ul style="list-style-type: none"> • Elderly and large families resorting to solid fuel to save money on the cost of heating homes. • Canal or houseboat dwellers. • Rural/Semi-Rural communities with historic smoke control exemptions. • Gypsy/traveller communities (specifically the more nomadic groups) who often struggle to integrate abodes into the local infrastructure and may rely on burning fuels for electricity and heat generation. 	<ul style="list-style-type: none"> • Elderly and large families • Rural/Semi-Rural communities • Gypsy/Traveller and other nomadic/unconventional communities

Equality, Health and Wellbeing and Human Rights	Affected populations
<p>Regarding this, consultation and research is required into how these groups operate and how they can be supported if the proposal affects them, especially the rural/semi-rural and gypsy/traveller nomadic communities. This will be considered within the forthcoming consultation stage.</p> <p>Some themes in the plan have actions that involve the idea of awareness and human behaviour as opposed to physical or infrastructure changes, especially through collaboration with schools and community groups. A present issue with this is that efforts relating to air quality are quite often organised with affluent areas and schools who tend to be vocal and organised, creating the potential for an imbalance with the outreach of the plan and a societal imbalance for impoverished and unconventional schools (e.g., deaf, special needs and foreign language schools) in particular. Areas of deprivation are more at risk of adverse health issues. The easiest way to address this is to make a marked effort in the inclusion of all possible schools, community groups and maybe even residential care settings into actions. Though schools in more deprived areas are notable to include, it would be relevant and useful to include schools of every denomination.</p> <p>The actions around low emissions vehicles disproportionately benefit males more than females due to the statistical trends of men being more likely to be car owners and drivers than women. These trends are further replicated when it comes to minority and ethnic groups, with people identifying as white British being more likely to possess cars than other groups. Higher earners are also more likely to possess cars. Though an issue, the plan actively supports the Council's wider transport strategies and action plans. These promote sustainable travel methods such as walking, cycling and public transport alongside wide ranging policies to ensure equal opportunities.</p> <p>As a part of the themes around integrated policy, there are prerogatives to increase collective council officers' knowledge of air quality related matters and solutions. This may have consequences for staff being unable to take wider considerations into account by increasing workload and time taken to develop projects and plans. However, multi-disciplinary work is to be promoted, and training provided to support staff and provide a better policy outcome for the city. To ensure training is available to all staff, different days, dates, and times will be available to ensure those with different work arrangements can attend. Senior managers would need to promote attendance and multi-disciplinary working and consider the impacts of increased workload.</p>	<ul style="list-style-type: none"> • Impoverished communities • Disabled people • minority and ethnic groups • Special needs groups <ul style="list-style-type: none"> • Female population • Minority, and ethnic groups • Impoverished communities <ul style="list-style-type: none"> • Local government employees

Environment and Sustainability including climate change emissions and impacts	Affected populations
<p>Positive</p> <p>The overall aim of the AQAP is to address the need for improving ambient air quality for the purposes of health and wellbeing. The goal of improved air quality is intended to be reached with the different themes in the plan that all consist of measures that will result in emissions reductions and an improved citywide sustainable and environmental outlook. Therefore, the AQAP can also be seen as a concise effort to improve the environment and take account of sustainability considerations.</p> <p>As mentioned above, while often thought to only concern health, poor air quality has effects on the environment including natural and built environments. The examples of historically poor air quality are evident when observing many of Edinburgh’s smoke-stained buildings. The improvement of air quality has clear benefits across many aspects of the physical environment.</p> <p>The co-benefits of the Plan are evident in contributing towards greenhouse gas reductions through general emissions reductions and discouraging inefficient heat/power provision (e.g., biomass combustion and heating of outdoor space). As an alternative the Plan aims to ensure the promotion low carbon technologies, which will also have added benefit for the carbon reduction and climate adaptation sector.</p> <p>The AQAP was drafted in conjunction with three other Edinburgh plans that all have the concepts of environment and sustainability at the forefront of their long-term goals. These are the:</p> <ul style="list-style-type: none"> • City Plan 2030 • City Mobility Plan • 2030 Climate Strategy <p>These plans have all been considered in the creation of the AQAP and have all been previously vetted through the SEA and IIA process for their environmental impacts, leaving very few uncertainties over any risk of negative environmental impacts.</p>	<ul style="list-style-type: none"> • All
<p>Negative</p> <p>Due to the nature of the plan being an act of environmental improvement, there are no expected negative environmental and sustainable impacts. Most themes and their corresponding actions do not propose any new physical change to the fabric of the environment that is not being undertaken with a sustainable goal.</p>	<ul style="list-style-type: none"> • None

Economic	Affected populations
<p>Positive</p> <p>Along with the equality and well-being benefits of the social housing retrofits, there is also major economic benefit for those who live within social housing, which is also referenced and supported in the Council's climate strategy. The users of social housing are often less affluent and often close to or below the poverty line, meaning that rising energy costs are more likely to disproportionately affect those within social housing. The retrofit can take much of the strain from the effects experienced from sudden rises from inflation and a cost-of-living crisis.</p> <p>Businesses can make substantial savings with the benefits of the ECO Stars scheme predominately through fuel and insurance savings. For example, driver training means less bumps and incidents, so vehicles have less time of the road. The scheme is free to join and provides fleet efficiency information, that may not always be available, especially in micro, small and medium size businesses. Actions are often being taken within most sectors to renew vehicle fleets to modern standards, but the scheme allows for businesses to achieve it faster and with more economic benefits.</p>	<ul style="list-style-type: none"> • Social-housing users • Impoverished groups • Businesses
<p>Negative</p> <p>The discouragement of the future use of commercial biomass could have negative economic impacts for groups who intend to create a business that would rely on biomass burning as a means or heating/power or waste disposal. It is possible that those who would depend on biomass for waste disposal e.g., joiners, could justify their use, although the local air quality impact would need to be assessed in detail (through the Planning process). Businesses, especially those in the urban environment, where emissions would have more of an impact on the population, would need a good level of education, support and encouragement to transition to low carbon technologies.</p> <p>There could be an impact on businesses selling boilers for commercial use. However, this is likely to be low, and the health and wellbeing aspects of the plan outweigh these concerns</p> <p>Restriction of external gas heater and firepits could be economically consequential to businesses who rely on an outdoor setting. It is possible that restricting this could risk a decline of customer attraction in the winter months, however consideration could be given to alternative heating solutions e.g., electric.</p> <p>Regarding public transport, the cost to de-carbonise and electrify fleets is high, and the costs of having to undergo this shift by</p>	<ul style="list-style-type: none"> • Businesses • Self-Employed • Businesses • Transport companies

Economic	Affected populations
<p>transport companies could see fares rising and bus routes being reconsidered and cuts to routes to less well served areas. There is funding available for the retrofit of buses to new engine standards (Euro 6 equivalent) or electric models, such as the LEZ funding available. This should be further encouraged and utilised by Edinburgh companies, due to most routes interacting with the LEZ.</p> <p>The Council has a stake in two major public transport organisations within the city - Lothian Buses and Edinburgh Trams, where ease of co-operation is interlinked with the shared ownership status and the significant scale of operations. There could be negative impacts on other public transport service providers if they are not comparatively supported. These services are just as relevant as although they also provide city services, in addition they link Edinburgh on a regional and national scale through inter-city transit to the rest of Scotland and UK. Engagement with the public transport sector will need to include access to all major operators. Putting a greater focus into co-operating with all public transport companies will ensure there is equitable change development.</p>	<ul style="list-style-type: none"> • Public transport commuters • People commuting to Edinburgh from outside city

9. Is any part of this policy/ service to be carried out wholly or partly by contractors and if so, how will equality, human rights including children’s rights, environmental and sustainability issues be addressed?

Yes. It is possible that some or part of the actions in the plan would be undertaken by contractors. Equality, human rights and environmental and sustainability issues would be addressed though the general terms and conditions of the Council’s contract requirements.

10. Consider how you will communicate information about this policy/ service change to children and young people and those affected by sensory impairment, speech impairment, low level literacy or numeracy, learning difficulties or English as a second language? Please provide a summary of the communications plan.

The workshop highlighted some equalities issues to work on with engaging with schools and community groups.

Some of the actions specifically relate to public communication led activity, therefore as they are developed detailed consideration will need to be given to specific needs.

11. Is the plan, programme, strategy or policy likely to result in significant environmental effects, either positive or negative? If yes, it is likely that a Strategic Environmental Assessment (SEA) will be required and the impacts identified in the IIA should be included in this. See section 2.10 in the Guidance for further information.

A SEA screening report was undertaken and submitted to the SEPA Gateway for consideration. The response concluded that a SEA is not required.

12. Additional Information and Evidence Required

Consultation and research were required into how gypsy/travellers and other nomadic/unconventional groups heat homes and whether it could be a source of solid fuel burning. Therefore, discussions were held with colleagues within the Council who engage with these communities on a regular basis. This work concluded that solid fuel burning was not generally relied upon for electricity and heat generation.

There are cases of nomadic type communities establishing roadside encampments during the summer months when the weather is more favourable, than winter. Some open fires may be organised for social gatherings, however cooking and heating requirements were generally met through the use of gas. Semi-permanent gypsy/traveller sites, tended to provide gas on a mains supply as a source of cooking and central heating. Renewable energy in the form of solar panels (and batteries) was also common throughout these communities.

Further evidence was also researched on solid fuel burning in general and the following links considered, especially for future information and campaigns to businesses;

<https://businessenergyscotland.org/summary-resources/>

Potentially some useful information for businesses/ practical help (webinars about low carbon heating etc), links to grants etc.

<https://www.zerowastescotland.org.uk/content/how-your-business-can-cut-its-carbon-footprint-2021> Nothing low carbon energy, but may be useful in the future.

[Find business energy efficiency grants and schemes | Ofgem](#)

Action For Clean Air – Global Action Plan (less specific on solid fuel burning)

Campaign resources for companies and businesses:

<https://www.actionforcleanair.org.uk/campaigns/clean-air-day/campaign-resources/business-resources>

General clean air guidance for businesses: <https://www.actionforcleanair.org.uk/business>

13. Specific to this IIA only, what recommended actions have been, or will be, undertaken and by when? (These should be drawn from 7 – 11 above) Please complete:

Specific actions (as a result of the IIA which may include financial implications, mitigating actions and risks of cumulative impacts)	Who will take them forward (name and job title)	Deadline for progressing	Review date
Consultation and research required into how gypsy / travellers and other nomadic / unconventional groups heat homes and whether it could be a source of solid fuel burning.	Shauna Clarke Environmental Health Officer	July 2023 End of consultation period	Meetings & research undertaken. 20 th July 2023 & 21 st Sept 2023
Ensure final plan includes actions in respect to <u>all</u> schools and community groups equally. This could be achieved through a more strategic approach working with Education Officers.	Shauna Clarke Environmental Health Officer	August 2023	Strategic approach adopted. 31 st October 2023 (AQAP Steering group meeting)
Businesses including licensed premises, should be provided with information, education and support, in considering new low carbon technologies and the co-benefit of these for local air quality.	Andrew Caldwell Business Growth & Talent Development Lead	Ongoing	Research undertaken (see section 12). Communication, especially on renewable energy and climate change will be ongoing.
Continue promotion of Low Emission Zone funding availability to all public transport operators operating in the city.	George King Transport Officer	March 2023 Future funding to be confirmed	Website updated August 2023 when national funding for the financial year opened. Social media campaign also launched. 24 th August 2023.

14. Are there any negative impacts in section 8 for which there are no identified mitigating actions?

Commercial biomass businesses that provide and service biomass related installations

15. How will you monitor how this proposal affects different groups, including people with protected characteristics?

The AQAP will be subject to an annual review and appraisal of progress on actions. Progress each year will be reported in the Air Quality Annual Progress Reports (APRs) produced by the Council, as part of statutory Local Air Quality Management duties, which are submitted to Scottish Government, the Department of Environment, Food and Rural Affairs (UK Government) and the Transport and Environment Committee. Issues affecting protected characteristics could be picked up through this process.

16. Sign off by Service Director

Name Peter Watton

Date 18 January 2024

17. Publication

Completed and signed IIAs should be sent to:

integratedimpactassessments@edinburgh.gov.uk to be published on the Council website www.edinburgh.gov.uk/impactassessments

Edinburgh Integration Joint Board/Health and Social Care

sarah.bryson@edinburgh.gov.uk to be published at www.edinburghhsc.scot/the-ijb/integrated-impact-assessments/