

Report

Report to:	Climate Change and Sustainability Committee
Date of Meeting:	28 April 2021
Report by:	Executive Director (Community and Enterprise)

Subject:	Air Quality in South Lanarkshire
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1. Purpose of Report

1.1. The purpose of the report is to:-

- ◆ Update the Committee with the position on air quality within South Lanarkshire.

2. Recommendation(s)

2.1. The Committee is asked to approve the following recommendation(s):-

- (1) the actions taken to date to improve air quality within South Lanarkshire are noted.

3. Background

- 3.1. Air pollution results from the introduction of a range of substances into the atmosphere from a wide variety of sources. These sources can be both natural and man-made in origin. Air pollution can cause both short term and long-term effects on health, and also on the wider environment. Improving air quality also contributes to tackling climate change and the transition to a net-zero society. Statutory air quality objectives, which are limits in concentrations of certain pollutants, have been developed which consider these issues as well as considering what is practical in terms of feasibility and costs. The main pollutants of concern in South Lanarkshire which have air quality objective are nitrogen dioxide (NO₂), particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2.5 microns (PM_{2.5}).
- 3.2. South Lanarkshire Council has a statutory duty to monitor the quality of air within its area in terms of the Environment Act 1995 and detailed within the Air Quality (Scotland) Regulations 2000 and 2002 as amended. This monitoring considers the air quality objectives to determine whether the limits in pollutant concentration levels have been exceeded. When air quality objectives are exceeded, the local authority must take action to improve air quality. Exceedances have been found in East Kilbride (Whirlies roundabout), Rutherglen (Main Street and Farmeloa Road) and Lanark (Bannatyne Street).
- 3.3. South Lanarkshire Council has formally declared air quality management areas at these three locations as required by statute. This process and resultant actions have been detailed in previous committee reports dated 3 June 2008, 11 November 2008 and 8 December 2015. Following declaration of air quality management areas, the local authority has a legal duty to develop and implement an Action Plan to improve air quality within these key target areas. The Action Plan has now been adopted and

is available

https://www.southlanarkshire.gov.uk/downloads/file/12278/air_quality_action_plan

- 3.4. Each financial year, local authorities are invited by the Scottish Government to submit funding applications to the Local Air Quality Management (LAQM) Fund to assist the Council in undertaking monitoring and AQMA/action planning work and to the Air Quality Action Plan Grant to assist the Council in progressing its air quality action plan.
- 3.5. All applications are carefully assessed by the Scottish Government and the Scottish Environment Protection Agency (SEPA) for feasibility, cost effectiveness, value for money, potential effects on local air quality and interrelationships with other measures in the action plan.
- 3.6. In addition, funding is provided to support Vehicle Emission Testing (VET) events as well as Engine Idling Patrols and Campaign works.
- 3.7. There are four different grant funds which relate to air quality works. A summary of all four grant streams are detailed as follows.

	LAQM	Action Plan	Smarter Choices Smarter Places	VET and Engine Idling	Total
2015/16	£50,000	£227,000	n/a	£19,000	£296,000
2016/17	£50,000	£120,526	n/a	£19,000	£189,526
2017/18	£37,000	£129,000	£41,241	£19,000	£226,241
2018/19	£126,437	£250,000	£51,716	£19,000	£447,153
2019/20	£85,577	£395,340	£72,516	£19,000	£572,433
Total	£349,014	£1,121,866	£165,473	£95,000	£1,731,353

- 3.8. Details of some of the projects supported by this funding are set out in section 4 of the report below.

4. Projects Supported by Grant Funding

4.1. Local Air Quality Management

Relates to works that maintain, repair and upgrade the air quality monitoring equipment and also any air quality modelling reports, for example, Low Emission Zone Screening Assessment and Detailed Assessment Reports. There are eight continuous air quality monitoring stations which monitor air quality and a number of smaller portable air quality monitoring pods which are used to review air quality in locations where siting a continuous monitor would not be practical. The continuous monitoring stations are located at Blantyre, Cambuslang, East Kilbride, Hamilton, Lanark, Raith and Rutherglen. Projects where the pods have been deployed include new road infrastructure locations and air quality monitoring around schools.

4.2. Air Quality Action Planning

Communicating with our communities on air quality matters, with a real focus on promoting the actions that we can all take to improve the quality of the air that we all breathe, was one of the key projects to support our action planning. 'The air that we breathe' story map is a one stop shop for all matters air quality related within South Lanarkshire.

The story map provides information on air quality through the ages in South Lanarkshire with a case study demonstrating the positive effect the opening of the M74 extension had on the local air quality within the town of Rutherglen. The health impacts air quality can have as well as links to an air quality alert scheme accessible via the Scottish Air Quality database are also promoted through the story map. The primary aim, however, of the story map is to support people and businesses to take their own actions to improve air quality.

The funding is used to take forward action plan measures which aim to improve air quality. A wide and varied package of projects are supported through this grant fund, many of which are delivered with key internal and external partners.

A range of these projects are detailed as follows with links to more detailed articles and examples provided where available:

- ◆ **Fleet recognition scheme** – the [Eco Stars Fleet Recognition Scheme](#) is available free to all businesses which travel through South Lanarkshire. This scheme supports and encourages operators of HGVs, buses, coaches and vans to run their fleets in the most efficient and green way to help reduce pollution in our towns and neighbourhoods. To date, 228 companies and 8,870 vehicles are covered by the scheme. In 2020\21 the project will be expanded to provide a separate Eco Stars Taxi Scheme. Bus operators have also been supported through the scheme to access the BEAR (Bus Emissions Abatement Retrofit) Grant assistance to essentially clean up emissions from buses. South Lanarkshire's own fleet services have a current four Eco Star rating, however, that is due for review given more recent [improvements to the fleet](#) ;
- ◆ **Bike hire feasibility study** - feasibility study has been undertaken for a bike hire scheme in the Rutherglen and Cambuslang area as well as for East Kilbride. This findings of this study supported the application for funding to trial an electric bike project as detailed below. In addition, a review of bike hire feasibility is being considered following a recent Council motion to provide an update briefing to the Climate Change Committee on active travel and cycling infrastructure projects;
- ◆ **Electric bikes** - in partnership with [SLLC's active schools' co-ordinators](#) an electric bike pilot project to facilitate more sustainable ways for staff to travel between schools. During lockdown these bicycles were re-assigned to support pharmacies and NHS staff whilst out and about within their local communities. The electric bike project is also being used as part of a pilot trial for patients referred to SLLC as part of the Physical Activity Prescription programme. The use of [electric bike](#) has also been promoted as a more sustainable commute option within our communities;
- ◆ **Cycle feasibility study** - an ongoing feasibility study is underway reviewing options to provide a designated (and segregated) walking/cycling pathway adjacent to the A725 from East Kilbride to High Blantyre;
- ◆ **Walking and cycling access paths to Strathclyde Park** – a promotional campaign undertaken in partnership with North Lanarkshire Council to highlight [existing and upgraded routes into Strathclyde Park](#) with the aim of encouraging active sustainable travel between the two authorities as well as

encouraging people to use these routes for leisure thereby improving awareness and confidence in walking and cycling;

- ◆ **Mapping of cycle routes** – a [digital cycling mapping project](#) pulling together all of South Lanarkshire's cycle routes to increase awareness of the full cycling network across South Lanarkshire;
- ◆ **Air pollution fighting plants** – working in partnership with a local community Grow 73 group to pilot the use of [pollution fighting plants](#) in close proximity to busy junctions;
- ◆ **Technical training events** – air quality and development control training events have been provided for planning, traffic and transportation as well environmental services staff to ensure that officers are aware of the importance of air quality within the planning process.
- ◆ **Traffic and Transportation joint projects** - working in partnership with Roads and Transportation, examples of joint projects include:
 - ◆ **Active travel studies** - undertaken in Lanark, East Kilbride and Rutherglen and Cambuslang. These studies identify the key routes which could be developed further to support uptake of walking and cycling in these towns. An example of one of the South Lanarkshire View active travel study articles is available [here](#).
 - ◆ **Traffic light improvements** – the [installation of intelligent traffic lights](#) in key locations to optimise the flow of traffic and minimise stop/start which contribute to higher emissions;
 - ◆ **Park and ride** – supporting the [increase in park and ride capacity](#) at key train station car parks to encourage the use of public transport as well as incorporating charging facilities for electric cars as well as safe and secure cycle parking provision;
 - ◆ **Cycle network** – investing in the [expansion and improvement of the cycle network](#) in air quality priority locations or routes that travel through these target areas;
 - ◆ **Bus stop enhancement** – support the improvements to bus stop infrastructure including the installation of real time bus time signs on priority bus routes
 - ◆ **Walking and cycling counters** - expansion of the cycling/walking counter network to gather usage data to help inform future network investment
 - ◆ **Traffic model review** – the Lanark gyratory traffic model review was supported to assist in determining future transportation decisions in the Lanark area.
 - ◆ **Cycle / scooter parking** – additional parking facilities are being provided within air quality management areas
 - ◆ **Electric vehicle infrastructure** – funds have supported the [electric vehicle charging infrastructure expansion](#) to future proof our communities for the increasing uptake of electric vehicles by South Lanarkshire residents and businesses. The benefits and support available to encourage the transition from conventional vehicles to electric vehicles has also been supported through [promotional events](#);

4.3. Joint Smarter Choices, Smarter Places (Paths for All) and Air Quality Action Planning

Transport Scotland provides funding to the charity organisation Paths for All. This funding supports behaviour change initiatives aimed at encouraging the uptake of active and sustainable means of travel. This funding requires to be match funded and the air quality action planning grant funds is utilised to match this funding. Projects supported through this route include:

- ♦ **Air quality and sustainable travel school workshops** – prior to the pandemic, school workshops focusing on air quality and sustainable active travel for the school commute were run. Currently working with the contractor to see whether an online active travel resource could be developed and piloted in South Lanarkshire. If successful, this is a potential resource that could be used by schools across Scotland, accessible via the education portal within the Scottish Air Quality website resource.
- ♦ **Active travel campaign** – promoted active sustainable travel through bus and billboard adverts – shown below. In addition, promotional adverts were shown within the two local cinemas (Hamilton and East Kilbride) to encourage this positive travel behaviour change.



- ♦ **Beat the Street** - a walking and cycling promotional programme aimed at converting a local community into a giant active travel game. Games have been run in East Kilbride, Lanark and Rutherglen with the most recent game due to be completed by the end of April in Hamilton and Blantyre.

4.4. Vehicle Emission Testing and Engine Idling

Vehicle emission testing involves undertaking roadside testing to ensure that since the vehicle's previous MOT check, no faults or defects have occurred which could cause harmful emissions to be emitted from the vehicle. A number of testing events take place across South Lanarkshire and these events are delivered in partnership with Police Scotland and North Lanarkshire.

When an engine is left idling it can produce up to twice as much exhaust emissions as a vehicle in motion. There is temptation to leave the engine running in warmer weather for air conditioning and in colder weather to keep warm. Sometimes it is just habit that stops people from turning off their engines.

[Engine idling educational campaigns](#) as well as patrols have been undertaken to raise awareness of the no idling campaign. Patrols have focused on schools and sports pitches where higher incidence of idling has been reported where especially young vulnerable lungs being exposed to these unnecessary higher emission levels.

5. Project Outcomes and Impact on Air Quality

- 5.1. An Annual Progress Report is submitted to the Scottish Government. The Report provides a summary of the previous year's measurements conducted across South Lanarkshire; it also considers any new potential sources of air pollution and if any further action is required to protect or improve air quality within South Lanarkshire.
- 5.2. As mentioned above, South Lanarkshire Council has a number of air quality monitoring locations throughout the Council area monitoring for those pollutants of concern, namely Nitrogen Dioxide (NO₂); Particulate Matter less than 10 microns (PM₁₀) and Particulate Matter less than 2.5 microns (PM_{2.5}). There are 8 continuous monitors as well as a network of 41 NO₂ diffusion tubes. A map showing the locations of the continuous monitors can be found at Appendix 1 of this report and also shows a number in adjoining local authority areas.
- 5.3. The trends in the monitored data from 2015 to 2019 are shown in Appendix 2. The graphs show that improvements are being made at all locations and are below the Scottish Government National Air Quality Objectives (NAQO) with the exception of two sites. The sites at 24 Low Patrick St, Hamilton and 233 Glasgow Road, Blantyre have been showing monitored levels above the NAQO's and a Detailed Assessment on air quality is currently being undertaken at both locations. However, at all other monitored locations, the trends for NO₂ and PM₁₀ show marked reductions year on year from 2015 to 2019. The trends for PM_{2.5} show that there have been some increases in concentrations monitored but they are still all below the NAQO for this pollutant.
- 5.4. In addition to the air quality monitoring stations, the Council has also installed a network of cycle and walking counters which show usage of the current cycling and walking infrastructure within our communities. There are currently 33 such sites and data from a selection of these sites has been collated in Appendix 3 with daily flows presented for 2020 and compared to cycling flows from 2019. It is noticeable that daily, weekly and monthly cycle trips have increased significantly at these sites during the Covid-19 pandemic period, particularly since the first lockdown period on 23 March 2020.
- 5.5. In conclusion, the impact of the projects set out in section 4.0 is having a positive impact on air quality and, as referred to above, makes a contribution to the wider climate change agenda.

6. Employee Implications

- 6.1. There are no employee implications.

7. Financial Implications

- 7.1. External funding was sourced from Scottish Government's Air Quality Action Planning grant and also Smarter Choices, Smarter Places. The total grant awarded for all four grant streams for the period 2015 – 2020 amounts to £1,731,353.

7.2. External funding has now been sourced for a 2020/21. The monies are claimed from Scottish Government quarterly in arrears.

8. Climate Change, Sustainability and Environmental Implications

8.1. A strategic environmental assessment screening report has been submitted for South Lanarkshire's Air quality Action Plan to the Scottish Government's Gateway organisation and accepted.

9. Other Implications

9.1. Failure to meet sustainable development and climate change objectives is one of the Council's top risks.

10. Equality Impact Assessment and Consultation Arrangements

10.1. This report does not introduce a new policy, function or strategy or recommend a change to an existing policy, function or strategy and, therefore, no equality impact assessment or consultation is required.

Michael McGlynn

Executive Director (Community and Enterprise Resources)

8 April 2021

Link(s) to Council Objectives and Values

- ◆ Improve the quality of life of everyone in South Lanarkshire
- ◆ Make communities safer, stronger and sustainable
- ◆ Encourage participation in physical and cultural activities
- ◆ Work with communities and partners to promote high quality, thriving and sustainable communities
- ◆ Accountable, effective, efficient and transparent

Previous References

- ◆ Community Resources Committee 3 June 2008 Air Quality Management Area
- ◆ Community Resources Committee 11 November 2008 Air Quality Management Area – Whirlies Roundabout East Kilbride
- ◆ Community Resources Committee 8 December 2015 Air Quality Management Area – Rutherglen
- ◆ Community Resources Committee 8 December 2015 Air Quality Management Area – Lanark
- ◆ Bullet point list or None

List of Background Papers

- ◆ Environment Act 1995
- ◆ Air Quality (Scotland) Regulations 2000
- ◆ Air Quality (Scotland) Amendment Regulations 2001

Contact for Further Information

If you would like to inspect the background papers or want further information, please contact:-

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