



Glasgow City Council

**Net Zero and Climate Progress Monitoring City
Policy Committee**

**Report by George Gillespie, Executive Director of
Neighbourhoods, Regeneration and Sustainability**

Contact: Gavin Slater

Ext: 78347

Item 3

11th August 2026

AIR QUALITY ANNUAL PROGRESS REPORT 2026

Purpose of Report:

To provide Committee with Glasgow's 2025 Annual Progress Report on Air Quality.

Recommendations:

The Committee is asked to:

- (a) Note the content of this report on air quality in the city.
- (b) Note the new data available on pollution levels
- (c) Note the continued assessment of the impact of the Glasgow Low Emission Zone on city centre pollution levels
- (d) Note the continued compliance with statutory air quality objectives

Ward No(s):

Citywide: ✓

Local member(s) advised: Yes ☐ No ✓

consulted: Yes ☐ No ✓

1 Introduction

- 1.1 This report presents the findings of Glasgow City Council's Annual Progress Report (APR) on air quality, including an overview of data and trends in air quality across the city in the 2025 calendar year. The full report is provided in **Appendix A**.
- 1.2 The Environment Act 1995, which implemented EC Directive 96/62, requires that local authorities regularly review and assess the air quality within their area of responsibility. This review and assessment process is the basis of Local Air Quality Management (LAQM). It is intended to compare current and future concentrations of key air pollutants against the objectives detailed in the regulations.
- 1.3 In accordance with LAQM requirements, the APR considers monitoring data available since the last round of review and assessment ([Air Quality Progress Report 2025](#)), as well as assessing the impact from various potential sources of pollution, such as any major new developments.

2. Background

- 2.1 Previous rounds of the LAQM review and assessment process have resulted in Glasgow declaring Air Quality Management Areas (AQMA). A local authority is required to declare an AQMA where any of the statutory air quality objectives are not being met. The Glasgow AQMAs were declared due to elevated levels of the air pollutants nitrogen dioxide (NO₂) and particulate matter (PM₁₀).
- 2.2 The main source of air pollution produced within the city comes from road traffic sources. Airborne particulate matter is more heavily influenced by non-local effects such as prevailing wind conditions (over which the city has no control) and can be transported from continental Europe and beyond. Nitrogen dioxide, however, is more directly attributable to local traffic volumes and engine type – and in particular to diesel engines, which emit comparatively more nitrogen dioxide than petrol engines.
- 2.3 To date the city has declared four AQMAs, as follows:
 - City Centre (NO₂ and PM₁₀) – declared in 2002.
 - Parkhead Cross (NO₂) – declared in 2007 and revoked in 2020.
 - Byres Road/ Dumbarton Road (NO₂ and PM₁₀) – declared in 2007. Amended in 2020 to remove PM₁₀. Fully revoked in 2024.
 - City-wide (PM₁₀) – declared in 2012 and revoked in 2016.

3. Actions to Improve Air Quality

- 3.1 In response to the implementation of the AQMAs in the city, Glasgow City Council produced Air Quality Action Plans (AQAP) in 2004 and 2009, introducing a range of measures aimed at reducing air pollution in the city. The

AQAPs considered several measures such as vehicle idling enforcement, vehicle emission testing and initiatives towards cleaner vehicles. Other measures such as sustainable transport initiatives and public information promotion have been incorporated into the reporting process.

- 3.2 As a result of progress made to address pollution levels, the Citywide AQMA for PM₁₀ was revoked in 2016 and the Parkhead Cross AQMA for NO₂ was revoked in 2020 following a prolonged period of achieving the relevant air quality objectives. The Byres Rd / Dumbarton Rd AQMA was amended in 2020 to remove the PM₁₀ component. Revocation of the NO₂ element, and therefore the entire AQMA, was completed in 2024. Currently, the City Centre AQMA remains the only active AQMA in the city.
- 3.3 Following revised guidance and direction from the Scottish Government, a new [AQAP](#) was produced and approved by the City Administration Committee on [25th April 2024](#). The 2024 AQAP identified 7 key priorities and 21 action plan measures to be progressed within the five-year lifespan of the Plan.
- 3.4 Progress on AQAP actions is reported within the APR in section 2.2 and a table outlining progress during 2025 can be found in Table 2.2 of the APR.

4 Air Quality Update

- 4.1 Air quality is a devolved matter, and the Council therefore works to measure and achieve hourly, daily and annual objectives on various pollutants which have been set by the Scottish Government. The full list of air quality objectives can be found in Table 1.1 of the APR. The APR is the Council's submission on the current levels of these pollutants, the efforts made to reduce these further, and progress towards full compliance.
- 4.2 An update on the main pollutants of concern can be summarised as follows:

4.3 Particulate Matter (PM₁₀)

- 4.3.1 Levels of PM₁₀ recorded across the city in 2025 were satisfactory with both the daily mean and annual mean objectives being met at all monitoring locations. Annual mean concentrations recorded at ten automatic monitoring stations ranged from 8.4µg/m³ to 12.9µg/m³ against an objective level of 18µg/m³.
- 4.3.2 No days recorded a daily mean above the 50µg/m³ objective in 2023. This continued the trend of compliance in respect of this pollutant. It should be noted that the Scottish annual mean objective for this pollutant is set at just under half that of the UK and EU limits. The city therefore continues to perform well in this area.

4.4 Particulate Matter (PM_{2.5})

- 4.4.1 Levels of PM_{2.5} recorded across the city in 2025 were satisfactory with the annual mean objective being met at all monitoring locations. Annual mean

concentrations recorded at nine automatic monitoring stations ranged from $5.0\mu\text{g}/\text{m}^3$ to $7.5\mu\text{g}/\text{m}^3$ against an objective level of $10\mu\text{g}/\text{m}^3$. As ultra-fine particulate pollution is considered to be a pollutant with significant impact on human health, the city is also performing well in this respect.

4.5 Nitrogen Dioxide (NO₂)

- 4.5.1 Monitoring of NO₂ is undertaken using a combination of both automatic monitoring stations and diffusion tubes. Use of diffusion tubes allows the monitoring of this pollutant at more locations than is economic or practical using automatic stations. Although less accurate than the reference level automatic monitors, this accuracy is improved by use of monthly monitoring to compare against the annual mean objective and by the colocation of diffusion tubes with reference monitors and correction for 'bias'.
- 4.5.2 Levels of NO₂ in 2025 at all automatic monitoring stations were below the objective levels, continuing the trend of compliance observed since 2022. Glasgow Kerbside (Hope St - see Figure 1 below) remains the station recording the highest level of NO₂. However, NO₂ levels continue to decrease and the 2025 annual mean of $34.8\mu\text{g}/\text{m}^3$ at this location is now more than 10% below the objective level of $40\mu\text{g}/\text{m}^3$.
- 4.5.3 No exceedances of the annual mean NO₂ objective in 2025 were recorded in monitoring conducted by diffusion tube, continuing the compliance seen in 2024.
- 4.5.4 The hourly mean NO₂ objective is set at $200\mu\text{g}/\text{m}^3$ with 18 hours above this level permitted before an exceedance is considered to have been made. No hourly mean levels above $200\mu\text{g}/\text{m}^3$ were recorded at any of the monitoring stations in 2025.

4.6 NO₂ Trends

- 4.6.1 Levels of NO₂ pollution have been on a downward trend in recent years as a result of improvements in vehicle emissions and the phased introduction of the Glasgow LEZ for scheduled bus services since 2018. NO₂ levels dropped significantly in 2020 due to pandemic restrictions, before increasing in 2021 as these restrictions lessened. However, most automatic stations recorded a slight decrease in NO₂ levels between 2021 and 2022, with further decreases in subsequent years. Between 2024 and 2025 levels of NO₂ were generally stable with some locations observing a slight increase and others a slight decrease. Figure 1 below shows the trend at automatic stations between 2021 and 2025.

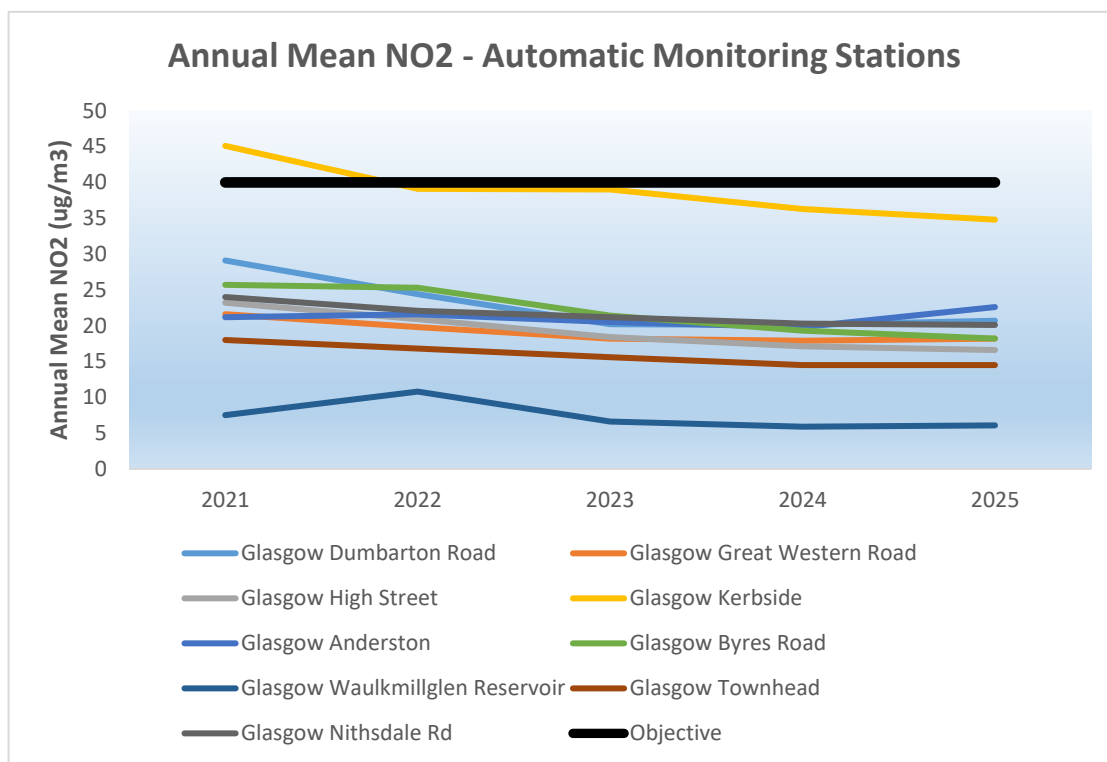


Figure 1: Trends in annual mean NO₂ at selected automatic monitoring stations

4.7 City Centre NO₂ Trends

- 4.7.1 As noted above, automatic monitoring stations, including the three located within the city centre, show a general decrease in annual mean NO₂. The Glasgow Kerbside site recorded an annual mean of 34.8µg/m³, recording a level more than 10% below the objective for the first time. The other city centre stations, Glasgow High St and Glasgow Townhead, recorded levels less than half of the annual mean objective at 16.6 and 14.5µg/m³ respectively.
- 4.7.2 Table 1 below shows results from the city centre monitoring using NO₂ diffusion tubes. As pandemic restrictions eased in 2021, all but three locations recorded rising levels of NO₂, with two locations exceeding the objective level for this year. As pandemic restrictions eased further in 2022, NO₂ levels continued to rise as did the number of locations exceeding the annual mean objective.
- 4.7.3 However, diffusion tube monitoring in 2023 observed a significant reduction in NO₂ levels recorded. The average reduction between 2022 and 2023 within the city centre and the Glasgow Low Emission Zone (which began enforcement on 1st June 2023) was 20%. Whilst NO₂ levels reduced across the city, the average reduction for locations outside the city centre was 15%.
- 4.7.4 Diffusion tube monitoring in 2024 observed a further significant reduction in NO₂ levels recorded. Again, NO₂ levels reduced across the city with the reduction most pronounced within the LEZ.

4.7.5 Comparing 2025 with 2022, the last full year before the introduction of the Glasgow LEZ, shows locations within the zone have observed an average reduction in annual mean NO₂ of 20%.

Table 1: Monitoring results from city centre locations during the period 2021 – 2025

Site Name	2021	2022	2023	2024	2025	% reduction 2022 to 2025
George Square	25.0	29.9	22.6	19.2	18.7	25.2
Union Street	37.5	38.4	31.4	24.3	25.1	33.1
Bath Street	31.7	36.2	29.7	21.9	26.5	16.4
Glassford St	28.6	34.3	30.7	23.0	28.4	0.7
Buchanan St	25.9	32.7	26.5	19.2	25.8	0.4
Castle Street	24.3	27.5	22.2	16.0	17.7	27.2
Hope Street 3	35.2	40.4	35.1	29.3	23.8	32.4
Montrose St	22.3	27.0	20.3	17.9	17.3	22.4
Cochrane St	28.6	29.9	22.9	20.8	19.0	33.6
Renfield Street	33.1	38.6	30.3	25.0	27.3	17.5
George Street	24.6	29.7	25.8	18.3	17.6	28.5
North Street	19.3	22.8	19.8	16.5	17.4	9.8
Hope Street 1	43.5	44.9	39.0	29.2	31.8	26.9
Gordon Street	40.2	50.0	42.1	29.8	37.9	5.7
Hielanman's Umbrella North	35.6	42.3	40.9	25.2	26.2	26.4
Saltmarket	26.2	31.8	21.2	16.5	19.5	25.6
High Street	25.3	34.8	25.7	20.2	22.1	12.6
Dobbies Loan	21.8	23.6	17.9	16.4	16.1	26.1
Dundasvale St	24.0	24.5	20.6	17.0	16.0	33.3
Royston Road	23.8	28.8	21.5	18.9	16.5	30.7
St Mungo Ave	21.0	23.7	19.6	14.8	17.9	14.8
Brown Street	19.3	21.0	15.7	11.4	11.5	40.4
Broomielaw	31.8	36.2	26.7	25.6	24.6	22.6
McLeod Street	22.1	29.3	20.7	15.8	18.2	17.6
Sauchiehall St	23.8	28.5	23.4	25.9	23.6	0.8
St Mungo's PS	14.7	19.2	14.6	15.7	15.4	-4.8

**Exceedances of annual mean shown in bold and red. Levels within 10% of the objective shown in bold.

4.7.6 As observed in the results from the automatic monitoring stations, diffusion tube results between 2024 and 2025 showed levels of NO₂ were generally stable with some locations observing a slight increase and others a slight decrease. However, measurements from the Gordon St diffusion tube showed a significant increase, resulting in a return to measured levels within 10% of the objective.

5. Conclusions

- 5.1 Reporting of air pollution levels is a statutory function for local authorities, particularly in relation to any exceedances of the air quality objectives.
- 5.2 Results from automatic monitoring stations in 2025 show full compliance with the relevant objectives for all pollutants, continuing the significant reductions observed from the introduction of the Glasgow Low Emission Zone.
- 5.3 The improvements in levels of NO₂ are such that compliance with the objectives has been achieved by a significant margin, providing a degree of confidence that compliance will continue. However, the increase in levels of NO₂ observed at the Gordon St location in 2025 will warrant closer study to potentially identify site specific factors that apply.
- 5.4 LAQM Guidance states in relation to the revocation of Air Quality Management Areas, *“A minimum requirement however will normally be at least three consecutive years where the objectives of concern are being achieved and where monitoring data demonstrates that further exceedances of the objectives are unlikely to occur.”*
- 5.5 This APR concludes that 2025 was the second year in which all statutory air quality objectives were met in Glasgow. Should progress be maintained, the last of the Glasgow Air Quality Management Areas will be eligible for revocation ahead of the schedule set out in the 2024 Glasgow Air Quality Action Plan. The AQAP set out that the City Centre AQMA be revoked by 2029.
- 5.6 Progress is also being achieved in relation to the long-term ambition to meet the World Health Organisation’s guidelines for annual mean NO₂. 17 monitoring locations across the city recorded levels in 2025 below the ambitious 10µg/m³ guidance.

6 Next Steps

- 6.1 The Glasgow Air Quality Progress Report will be submitted to the online reporting portal for independent assessment.
- 6.2 Monitoring and air quality action plan measures will continue and will be reported within the 2027 APR.

7 Policy and Resource Implications

Resource Implications:

<i>Financial:</i>	There are no new financial implications arising from the report.
<i>Legal:</i>	The report raises no new legal issues.
<i>Personnel:</i>	LAQM duties are undertaken utilising GCC personnel.
<i>Procurement:</i>	No relevant procurement issues.

Council Strategic Plan:	This work supports the key aims of Grand Challenge 3, Mission 2 of the Council Strategic Plan.
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Equality and Socio-Economic Impacts:

<i>Does the proposal support the Council's Equality Outcomes 2025-29? Please specify.</i>	LAQM does not impact on any of the Council's service delivery equality outcomes
<i>What are the potential equality impacts as a result of this report?</i>	No significant impact from this report.
<i>Please highlight if the policy/proposal will help address socio-economic disadvantage.</i>	No significant impact from this report.

Climate Impacts:

<i>Does the proposal support any Climate Plan actions? Please specify:</i>	LAQM has many co-benefits and shared actions with the Climate Plan including actions: 22 – development of the LEZ 26 – alternative actions for bus delivery 33 – feasibility study of a Workplace Parking Levy 42 – ban of gas heating in new developments
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51 - delivery of a comprehensive active travel network
 52 - enable a rapid and strategic shift to electric vehicles through increasing the current rate of deployment of EV charging infrastructure
 53 – support transition to cleaner public transport
 54 – transition GCC fleet to electric
 55 – transition private hire fleet to zero emissions by 2030
 56 - reduce the need to own and use a car through measures in the City Development Plan 2, Glasgow Transport Strategy and the Liveable Neighbourhoods

What are the potential climate impacts as a result of this proposal?

The APR includes an update on action plan measures, many of which have slight beneficial climate impacts.

Will the proposal contribute to Glasgow's net zero carbon target?

Measures progressed and reported within the APR have slight beneficial climate impacts, especially in relation to transport, and therefore contribute to the net zero carbon target.

Privacy and Data Protection Impacts:

Are there any potential data protection impacts as a result of this report
 Y/N

No data protection or privacy implications. This report presents analysis of publicly available data and does not represent any privacy or data protection issues.

If Yes, please confirm that a Data Protection Impact Assessment (DPIA) has been carried out

8 Recommendations

The Committee is asked to:

- (a) Note the content of this report on air quality in the city.
- (b) Note the new data available on pollution levels
- (c) Note the continued assessment of the impact of the Glasgow Low Emission Zone on city centre pollution levels
- (d) Note the continued compliance with statutory air quality objectives