

LOW EMISSION ZONE

GLASGOW

IMPROVING GLASGOW'S AIR QUALITY

Dom Callaghan





Supporting a fair and sustainable city where everyone gets to contribute and all can benefit from a flourishing Glasgow

Local Air Quality Management (LAQM)

Local Authorities have a duty to:

- Review and assess air quality in their areas
- Declare an Air Quality Management Area (AQMA) where there is evidence the air quality objectives are not being met
- Prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives

Pollutant	Air Quality Objective Concentration	Air Quality Objective Measured as	Date to be Achieved by
Nitrogen dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
Nitrogen dioxide (NO ₂)	40 µg/m ³	Annual mean	31.12.2005
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 7 times a year	24-hour mean	31.12.2010
Particulate Matter (PM ₁₀)	18 µg/m ³	Annual mean	31.12.2010
Particulate Matter (PM _{2.5})	10 µg/m ³	Annual mean	31.12.2020
Sulphur dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide (SO ₂)	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
Sulphur dioxide (SO ₂)	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005
Benzene	3.25 µg/m ³	Running annual mean	31.12.2010
1,3 Butadiene	2.25 µg/m ³	Running annual mean	31.12.2003
Carbon Monoxide	10.0 mg/m ³	Running 8-Hour mean	31.12.2003

A Brief History

The Modern Air Quality Framework

- Environment Act 1995 – Set out the requirement for an AQ Strategy and standards & objectives
- LAQM - Introduced in 1997, LAQM set out the system for local authorities to review air quality and declare Air Quality Management Areas (AQMAs) if standards are not met.
- Air Quality (Scotland) Regulations 2000 – Set out the objectives

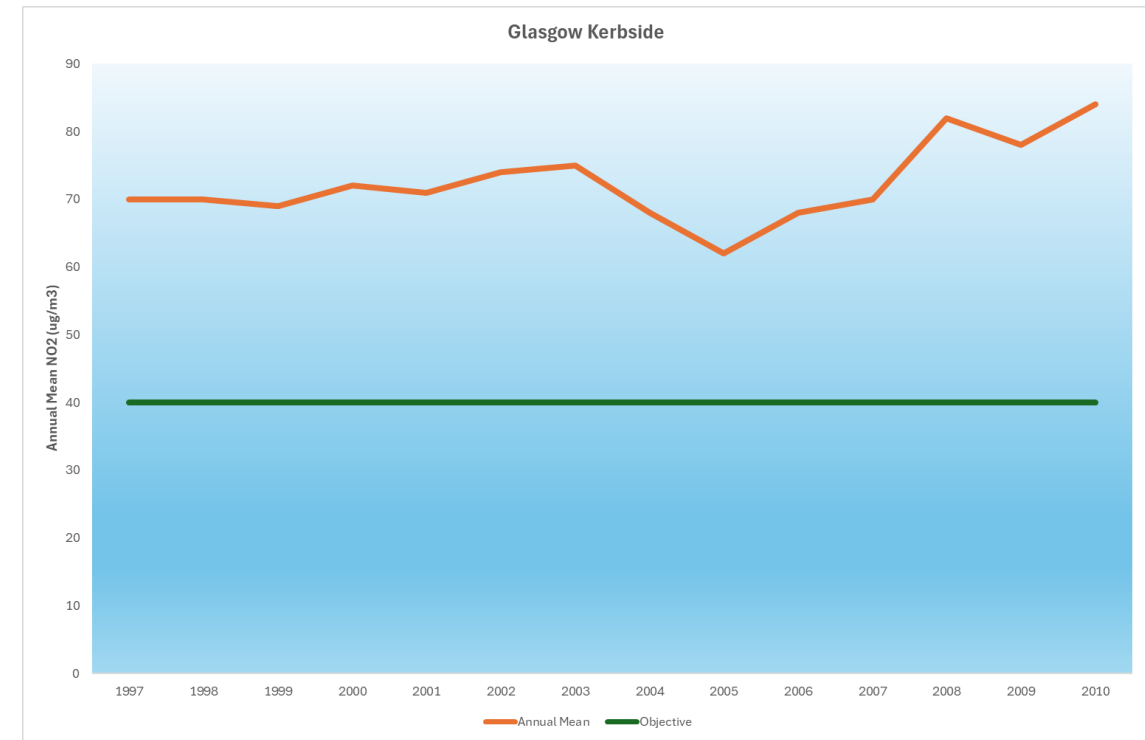
Glasgow's Approach

- Hired me!
- Undertook the old Stage I, II, III, IV assessments
- Declared the City Centre AQMA for NO₂ (annual and daily means) - 2002
- Produced the first Glasgow AQAP - 2004

How'd that work out...?

Not very well – but why?

- Main source of air pollution is from road traffic
- Tax incentives – 2001 VED reform
- “Dash for diesel”
- Diesel car sales went from 1 in 7 in 2000 to over half in 2015
- On the road – more than doubled between 2001 and 2011



More AQMAs

Glasgow has declared four AQMAs:

- City Centre, Parkhead Cross, Byres Rd / Dumbarton Rd and Citywide

Three AQAPs have been produced in response & adapted over time within our annual progress reports to incorporate new actions as appropriate.

OFFICIAL

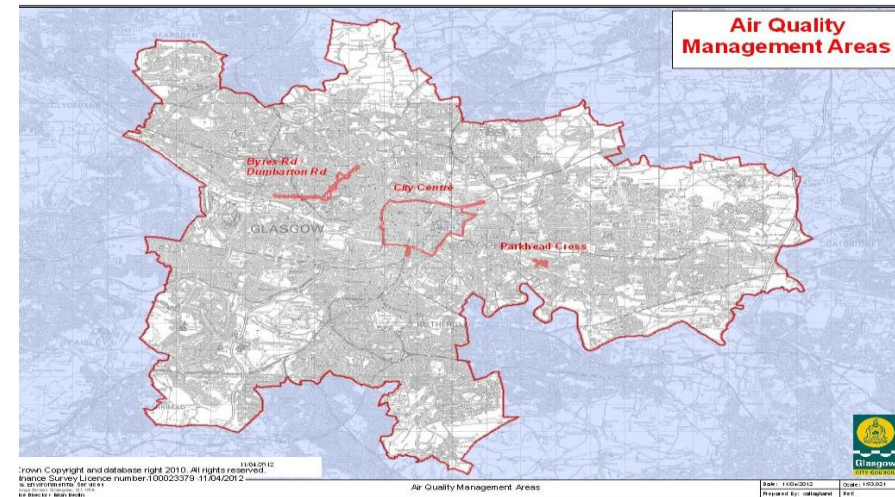
Glasgow City Council



Glasgow City Council
Air Quality Action Plan
In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management
2024

OFFICIAL

Glasgow City Council Air Quality Action Plan - 2024



Another Brief History

EU Alignment & Stricter Targets

- Air Quality Standards (Scotland) Regulations 2010
- Lower objectives for particulates

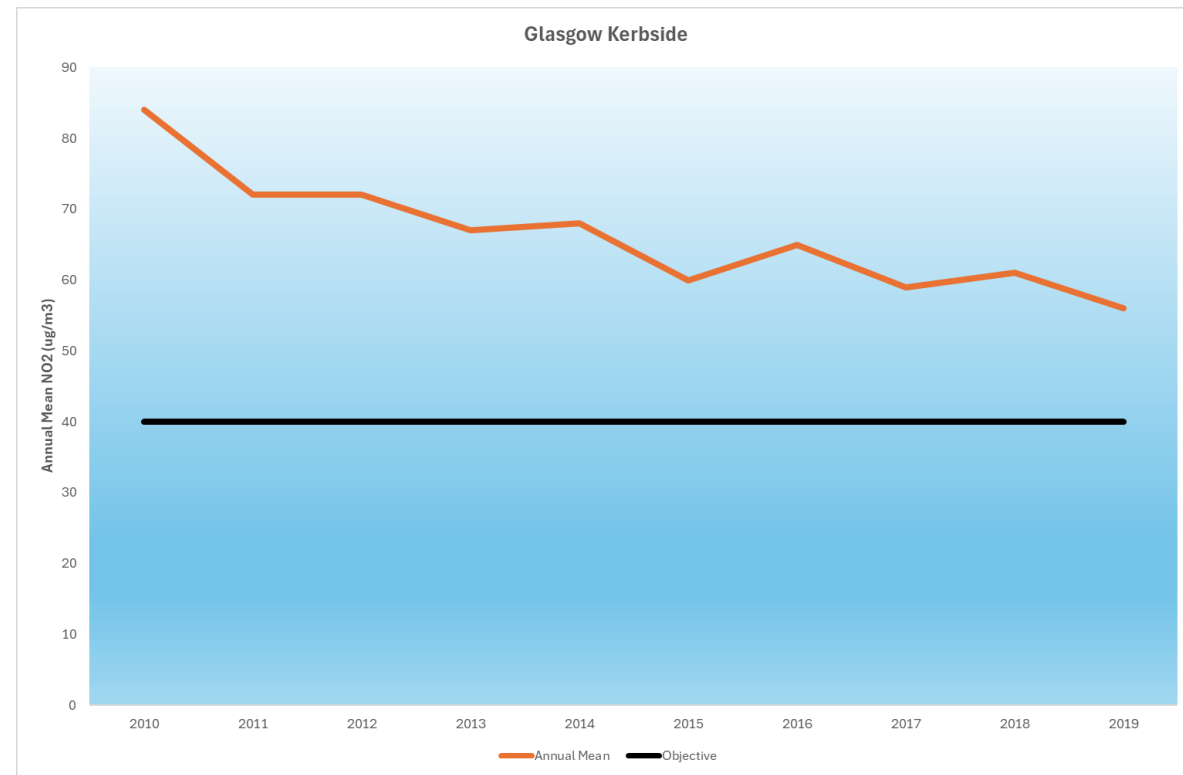
Glasgow's Approach

- Already declared further AQMAs for NO₂ (2007)
- Updated the AQAP (2009)
- Declared the whole city for PM₁₀ (2012)
- Undertook LEZ feasibility study (Dieselgate)

How'd that work out...?

A bit better – but not good enough!

- City centre NO₂ levels stopped rising and started declining.
- Rate was very slow – on trend would have taken many years to meet objective.
- Revoked the Citywide AQMA for PM₁₀
- Started seeing compliance with objectives in the other two AQMAs

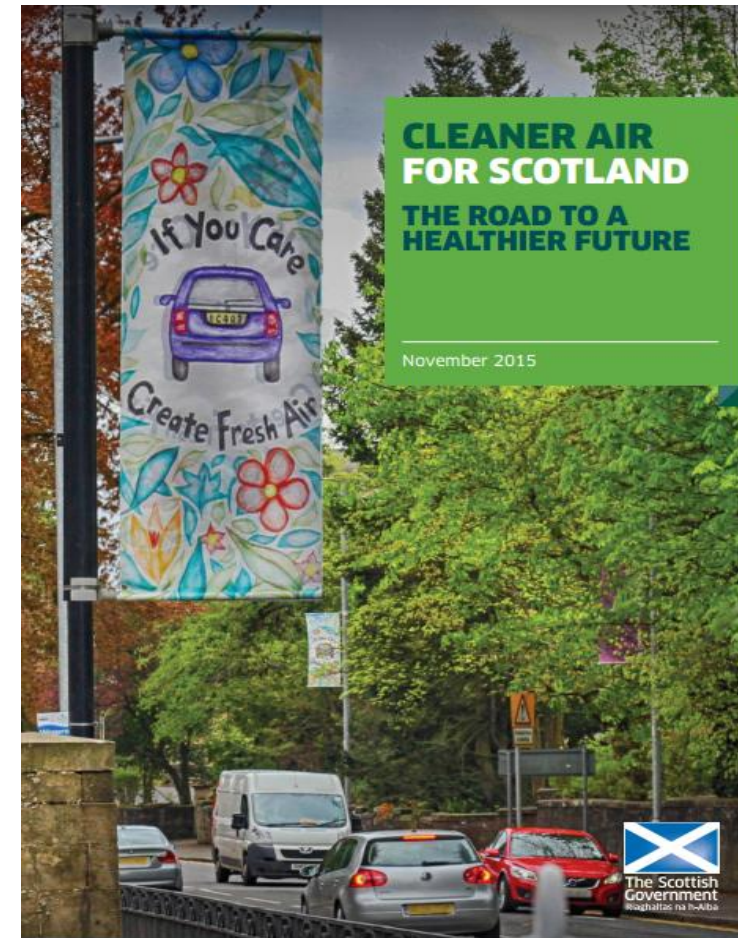


Cleaner Air For Scotland

CAFS - reduce air pollution to protect human health and fulfil Scotland's legal responsibilities as soon as possible

NMF - standardised approach to modelling air quality in Scotland. This framework supported the development of LEZs.

NLEF - developed to assist in the appraisal of air quality improvement options related to transport.



Glasgow's LEZ - Phase 1

- 2017 Program for Govt - Commitment to create “a Low Emission Zone (LEZ) in one of our cities by the end of next year (2018) – and working with local authorities to introduce LEZs into our four biggest cities by 2020”
- Transport Act 2019
- Regulations 2021
- Traffic Commissioner (TRC) re buses from 2018.

Phase 1 Bus journeys into, out of and through LEZ		
Year 1	December 2018	20%
Year 2	December 2019	40%
Year 3	December 2020	60%
Year 4	December 2021	80%
Year 5	December 2022	100%

LEZ Phase 1 - Issues

- Method – Traffic Regulation Condition (TRC)
- Operator objections
- Funding – BEAR / SULEBS / ScotZEB
- “State Aid”



Glasgow's LEZ – Phase 2

- Evidence prepared –Traffic Modelling / Multiple SEPA reports (source apportionment & dispersion modelling / Integrated Impact Assessment / Covid impact assessments)
- 2 Separate consultations & objection period
- LEZ came into effect on 31 May 2022 following approval from GCC and Scottish Ministers. (3 different GCC Committees)
- LEZ Phase 2 applied to **all vehicles** in the city centre from 1st June 2023.
- Limited exemptions applied – residents / taxis



Glasgow LEZ – Judicial Review

- Interim interdict sought on eve of LEZ enforcement
- Refused but permission granted for Judicial Review
- Full JR held in September 23.
Challenged on a number of grounds
- Dismissed on all grounds – but route for appeal on level of penalty charges.
- Appeal dropped.



Glasgow LEZ – Taxis

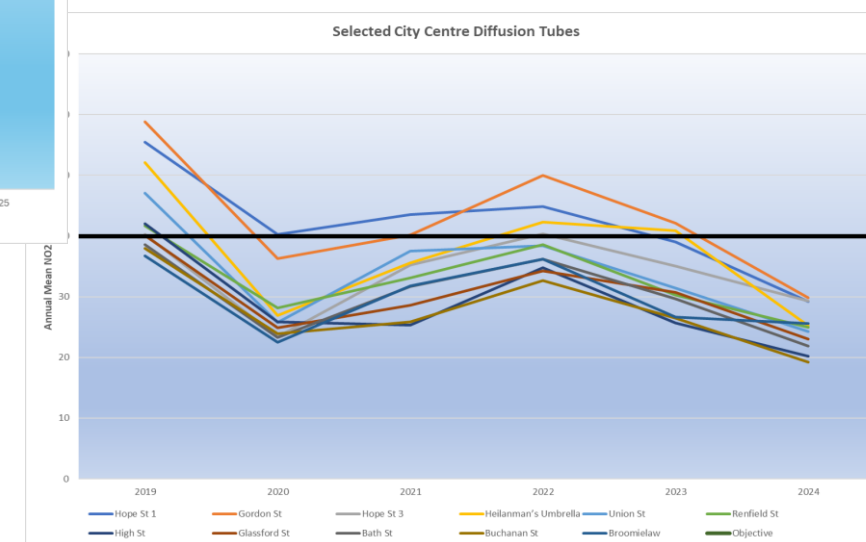
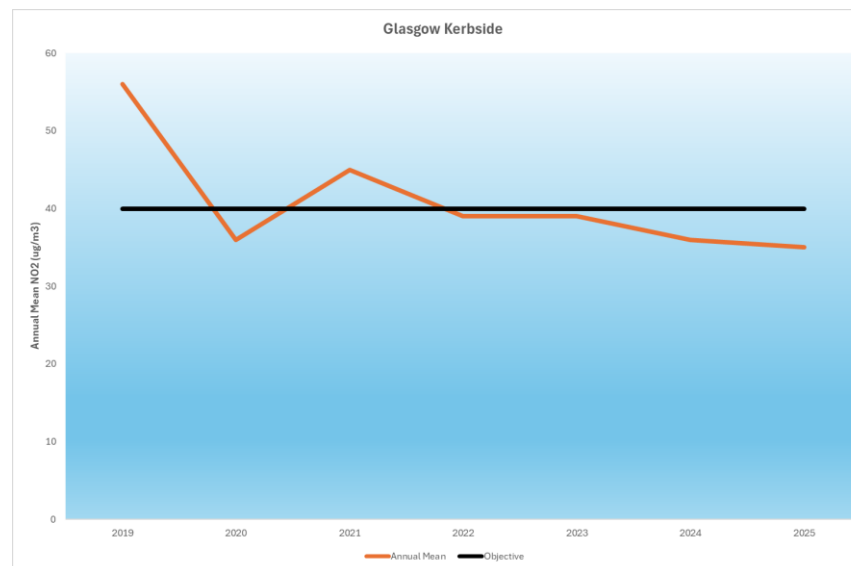
- Glasgow has a particularly aged taxi fleet with high levels of LEZ non-compliance.
- Significant contributors to city centre emissions
- Early engagement / support
- Time-limited exemption
- Ongoing flexibility to help compliance



How'd that work out...?

Pretty well!

- Two AQMAs revoked, leaving only City Centre
- 2024 marked the first time all AQ objectives met.
- Looking towards revocation (3 years)
- But keeping an eye on future developments around objectives.
- GCC stated ambition to meet WHO guidelines



Thank you for listening

- Information - www.glasgow.gov.uk/localairqualitymanagement
- <https://www.glasgow.gov.uk/LEZ>
- <https://www.glasgow.gov.uk/sustainability>
- Email – dom.callaghan@glasgow.gov.uk