

Blackpool Council

The logo for Blackpool Council features the text 'Blackpool Council' in a serif font. 'Blackpool' is in dark blue and 'Council' is in purple. Below the text is a stylized graphic consisting of two wavy, horizontal lines in shades of grey and blue.

Blackpool Council Air Quality Action Plan 2023 – 2028

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

October 2023

Executive Summary

This 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 Blackpool Council between 2023 and 2028.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³. Blackpool Council is committed to reducing the exposure of people in Blackpool to poor air quality in order to improve health.

Blackpool Council have developed actions that can be considered under six broad topics:

- Traffic Management
- Alternatives to private vehicle use
- Promoting Low Emission Transport
- Promoting Travel Alternatives
- Policy Guidance and Development Control
- Public Information

Our priorities are:

1. Improving air quality in Blackpool AQMA and providing evidence to demonstrate this, so that the AQMA can be revoked in the future

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

2. Improving air quality monitoring and communications, to ensure our residents and visitors are informed about local air quality
3. Reducing particulate matter (PM_{2.5}) emissions

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Blackpool Council's direct influence.

This AQAP was prepared by Ricardo for Blackpool Council.

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Introduction

This report outlines the actions that Blackpool Council will deliver between 2023-2028 to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the Borough of Blackpool.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Blackpool Council's air quality ASR.

Summary of Current Air Quality in Blackpool Council.

A summary of the current air quality situation in Blackpool is provided below. At the time of writing, the 2023 Annual Status Report (ASR) was being finalised for submission to Defra in October 2023. This document provides further information on air quality in Blackpool.

1.1 Air Quality Management Area

There is an Air Quality Management Area (AQMA) being addressed in Blackpool Town Centre. This was implemented under LAQM statutory duties in 2005 as a result of monitored annual mean NO₂ concentrations exceeding the national objective of 40 µg/m³, which was primarily caused by traffic congestion. The AQMA extends along the Town Centre, including Dickson Road, Church Street, Grosvenor Street, and Talbot Square (Figure 1).

1.2 Monitoring Network

In 2022, Blackpool Council undertook non-automatic monitoring of NO₂ at 17 sites within and around Blackpool Town Centre AQMA. Figure 2 shows that there have been no measured exceedances of the NO₂ national air quality objective of 40 µg/m³ in the AQMA between 2018-2022. In 2022, the highest recorded NO₂ concentration recording across Blackpool Council's monitoring network was at DF14 (6 Grosvenor Street) with a value of 21.7 µg/m³.

Air quality monitoring data for NO₂ in and around Blackpool Town Centre AQMA is presented in Figure 2. All diffusion tubes were compliant with the annual mean NO₂ air quality objective between 2018-2022. In 2018, DF5 (located at the former Talbot Road Bus Station) measured the annual mean NO₂ concentration to be a value of 39 µg/m³ in 2018, which is within 10% of the annual mean NO₂ objective.

Figure 1: Map of NO₂ monitoring sites within and around Blackpool AQMA

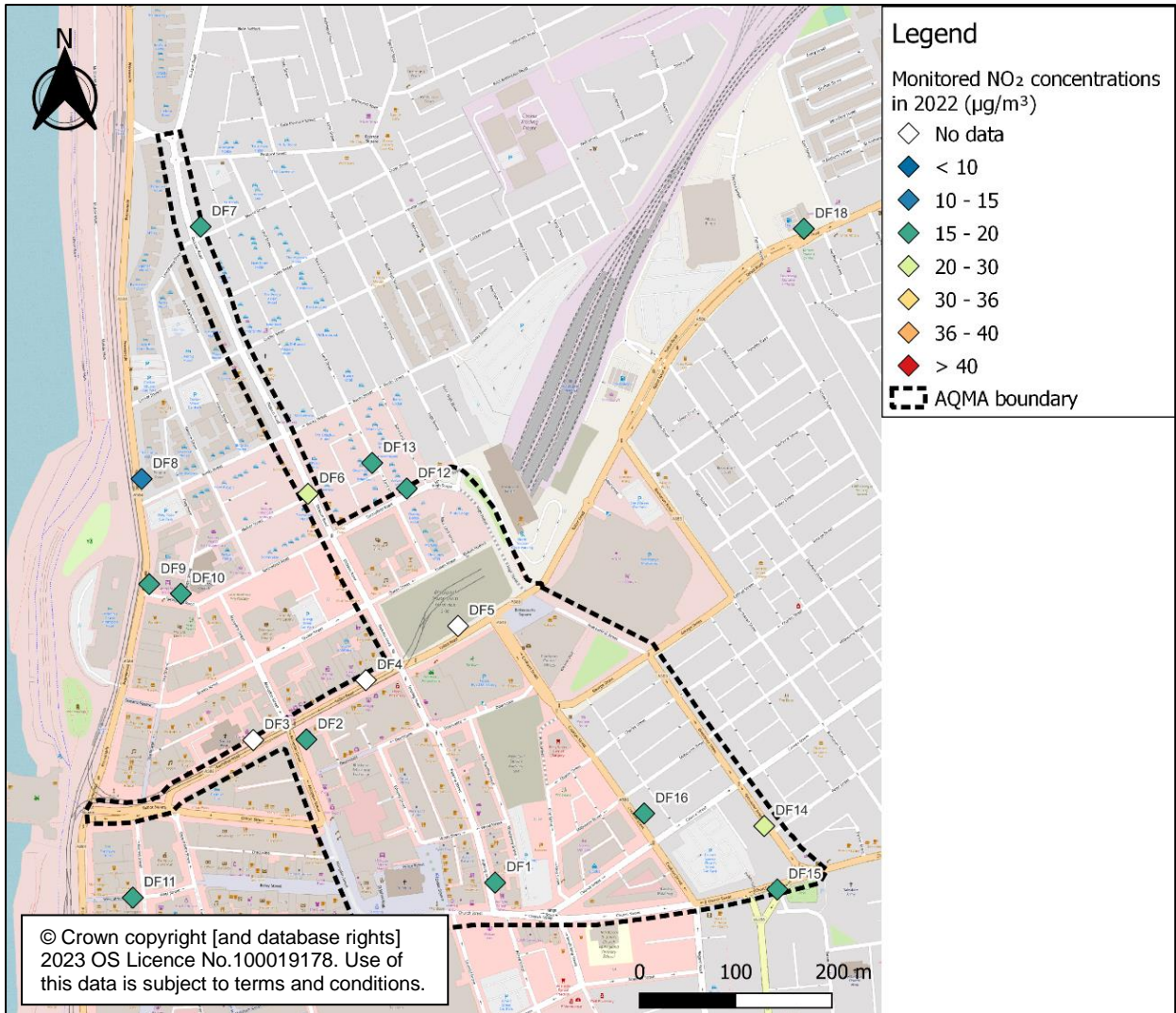
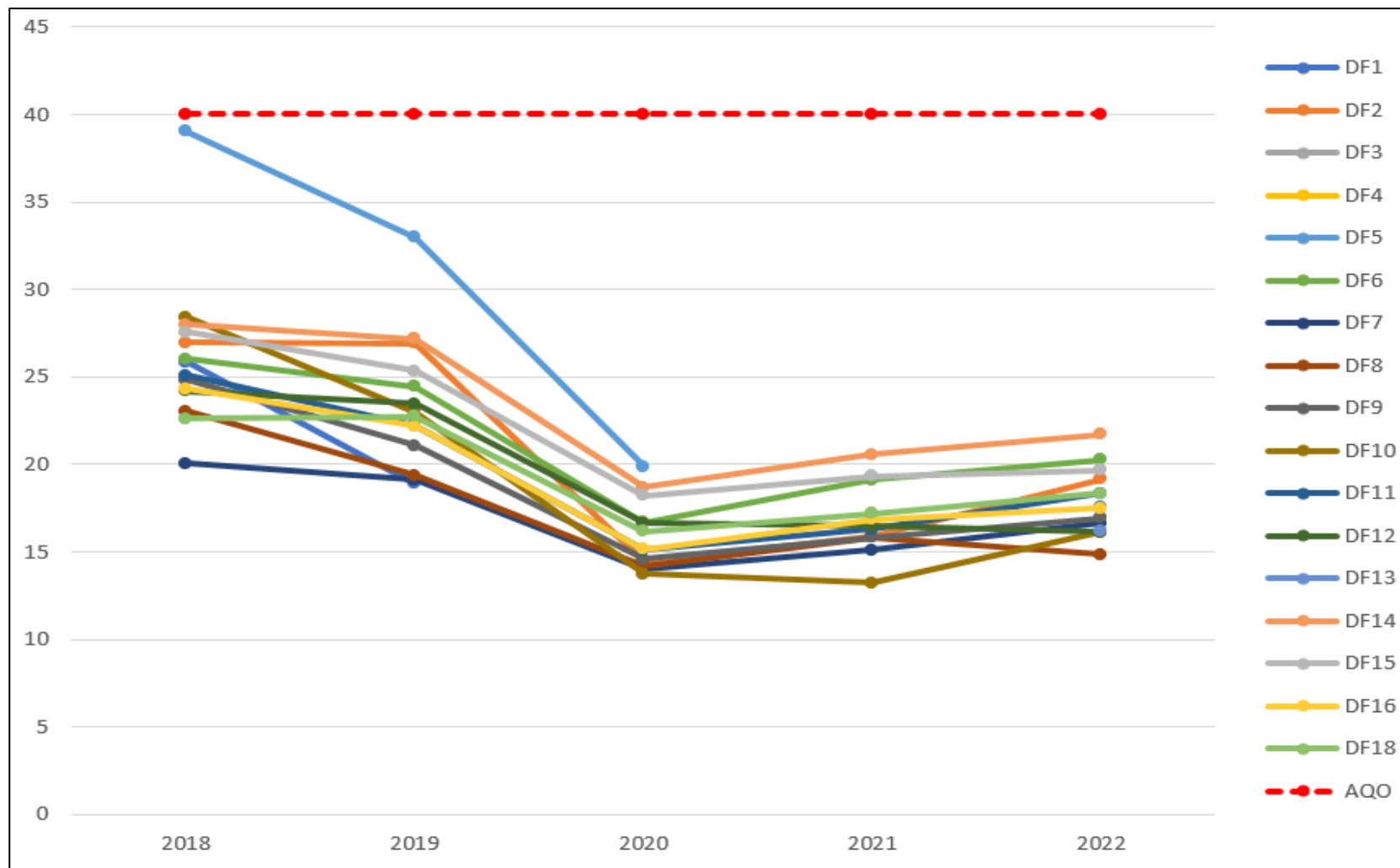


Figure 2: Annual mean NO₂ concentrations for Blackpool AQMA 2018-2022



1.3 Considerations for revoking the Blackpool Town Centre AQMA

Although no exceedances were monitored between 2018-2022, DF5 (located at the former Talbot Road Bus Station) measured the annual mean NO₂ concentration to be a value of 39 µg/m³ in 2018, which is within 10% of the annual mean NO₂ objective. The LAQM Technical Guidance (LAQM.TG22 Section 3.53 – 3.65)⁴ states that the revocation of an AQMA can be considered following three consecutive years of annual mean concentrations being lower than 36 µg/m³ (i.e. within 10% of the annual mean NO₂ objective).

Monitoring at this site has been temporarily suspended since 2020 due to ongoing construction works and will be reinstated once the construction site hoarding has been removed. Three full years of monitoring data at this site (2024-2026) will provide evidence as to whether the Blackpool AQMA can be revoked.

⁴ Defra. Local Air Quality Management Technical Guidance (TG22), August 2022

Blackpool Council's Air Quality Priorities

1.4 Public Health Context

In the UK, air pollution is the largest environmental health risk, and poses substantial risks to human health, the natural environment, and the global economy^{5,6}.

In Blackpool, air quality is generally good and in compliance with the legal concentration levels set by the UK Government. However, there are still potential improvements to be made in light of the air quality targets for 2040 established under the Environment Act 2021⁷ and to lower concentrations closer to the World Health Organisation's (WHO) Global Air Quality Guidelines⁸.

In Blackpool, the primary pollutant of concern is nitrogen dioxide (NO₂) which is primarily caused by traffic congestion and is concentrated along roadsides. Frequent exposure to high NO₂ concentrations increases risk of respiratory illnesses, cardiopulmonary effects, asthma attacks, and decreased lung function.

Another pollutant of concern in Blackpool is fine particulate matter (PM_{2.5}), which is largely caused by emissions from domestic and commercial combustion. Blackpool Council has reviewed the fraction of mortality attributable to particulate air pollution

⁵ Office for Health Improvement & Disparities, Air Pollution: applying All Our Health, 2022.

<https://www.gov.uk/government/publications/air-pollution-applying-all-our-health>

⁶ European Environment Agency, Air pollution is the biggest environmental health risk in Europe.

<https://www.eea.europa.eu/themes/air/air-pollution-is-the-single>

⁷ Air Quality Targets in the Environment Act, Defra, <https://uk-air.defra.gov.uk/library/air-quality-targets>

⁸ World Health Organisation, WHO global air quality guidelines: particulate matter (PM_{2.5} and PM₁₀), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide, 2021.

<https://www.who.int/publications/i/item/9789240034228>

(indicator D01) as published by Public Health England⁹. The fraction of mortality attributable to particulate air pollution in Blackpool in 2021 (the most recent year of data) was 5.9%. This is slightly higher than the regional and national averages of 5.3% and 5.5%, respectively.

There are some groups of people that are more vulnerable to poor air quality, such as young children, elderly people, pregnant women, and people with pre-existing heart or lung conditions. In Blackpool, 21% of the population are over the age of 65, and 16% of the population are under the age of 15, compared to the national averages of 18% and 17%, respectively^{10,11}. This means that a higher proportion of Blackpool residents are more vulnerable to poor air quality compared to the national average.

1.5 Planning and Policy Context

1.5.1 National Context

The UK Air Quality Strategy published by the Department for Environment, Food, and Rural Affairs (Defra) and Devolved Administrations, provides the policy framework for air quality management and assessment in the UK. It provides air quality standards and objectives for key air pollutants, which are designed to protect human health and the environment. It also sets out how the different sectors: industry, transport, and local government, can contribute to achieving the air quality objectives. Local authorities play a particularly important role. The strategy describes the Local Air Quality Management (LAQM) regime that has been established, whereby every authority has to carry out regular reviews and assessments of air quality in its area to identify whether the objectives have been, or will be, achieved at relevant locations, by the applicable date. If this is not the case, the authority must declare an Air Quality Management Area

⁹ Office for Health Improvement and Disparities, Public Health Outcomes Framework, May 2023

¹⁰ Office for National Statistics, Population estimates, 2021.

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

¹¹ JSNA Blackpool, Population, 2022. <https://www.blackpooljsna.org.uk/Blackpool-Profile/Population.aspx>

(AQMA) and prepare an action plan which identifies appropriate measures that will be introduced in pursuit of the objectives.

The 2019 Clean Air Strategy sets out the case for action, with goals even more ambitious than EU requirements to reduce exposure to harmful pollutants. The Road to Zero sets out the approach to reduce exhaust emissions from road transport through a number of mechanisms; this is extremely important given that the majority of Air Quality Management Areas (AQMA) are designated due to elevated concentrations heavily influenced by transport emissions.

1.5.2 Regional Context

Air Quality is a regional issue; air pollutants released in one area may be transported in the atmosphere and contribute or result in poor air quality elsewhere. This applies across regions too. Therefore, it's important that districts across Lancashire are aligned in their approach and work together to improve air quality in the region.

The following regional policies, strategies, plans, and reports are relevant to air quality and have been used in the development of the air quality actions within this action plan:

- [Air Quality and Public Health, Reducing deaths and ill-health caused by poor air quality in Lancashire and Cumbria](#)
- [Lancashire Rights of Way Improvement Plan 2015-2025](#)
- [Actively Moving Forward: A ten year strategy for Cycling and Walking](#)
- [Lancashire County Council Highway Decarbonisation Strategy](#)
- [Lancashire Net Zero Pathways Options: Main Document](#)
- [National Bus Strategy: Lancashire County Council & Blackburn with Darwen Council Joint Bus Service Improvement Plan](#)

1.5.3 Local Context

The following local policies, strategies and plans are relevant to air quality and have been used in the development of the air quality actions within this action plan:

- [Blackpool's Climate Emergency Action Plan](#)
- [Blackpool Borough Council Active Lives Strategy 2021](#)

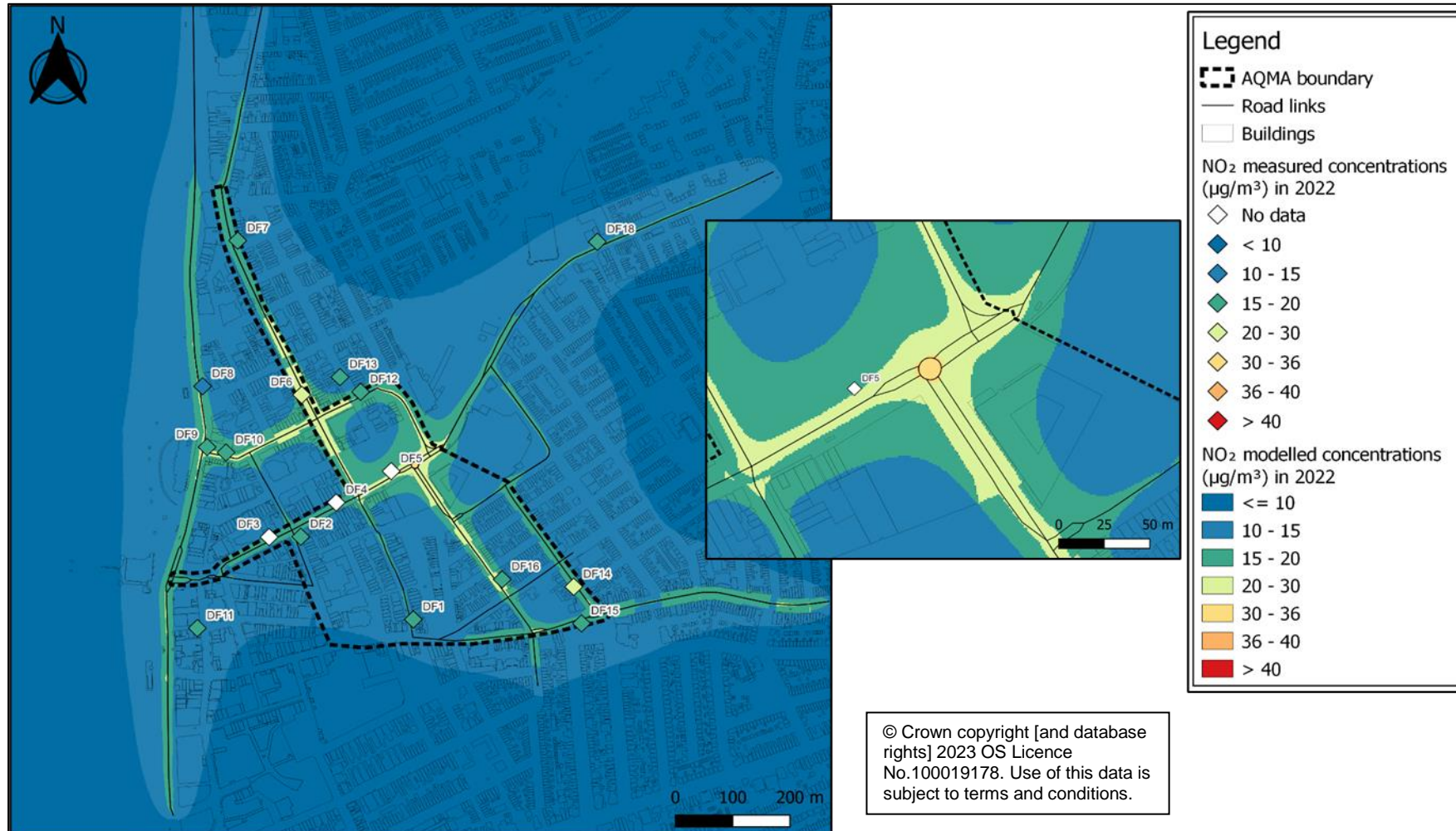
- [Blackpool Strategic Parking Review](#)
- [Blackpool Green and Blue Infrastructure Action Plan 2019-2029](#)
- [Blackpool Town Centre Strategy & Action Plan](#)
- [Blackpool Council Plan 2019-2024 Progress Update](#)
- [Blackpool Tree Strategy 2020-2030](#)
- [Blackpool Council Local Transport Plan: Implementation Plan 2018-2021](#)
- [Blackpool Local Plan Part 1: Core Strategy](#)
- [Blackpool Local Plan Part 2: Site Allocations and Development Management Policies](#)
- Blackpool Air Quality Strategy (not yet published)
- 2023 Blackpool Annual Status Report (not yet published)

1.6 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of NO_x emissions within Blackpool. By using a combination of local modelling inputs and Defra background concentration maps, a dispersion modelling study and source apportionment exercise was carried out by Blackpool Council in 2023 to better understand the pollution scene in Blackpool.

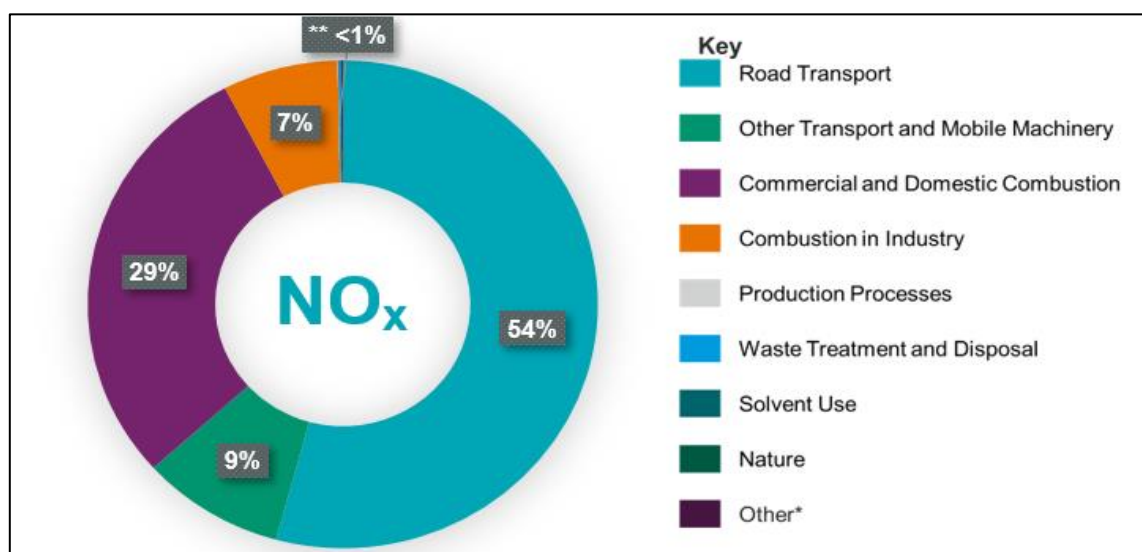
Figure 3 shows a map of modelled NO₂ concentrations across Blackpool in 2022. Modelled NO₂ concentrations are all below 36 µg/m³, with the highest concentrations being found along points of congestion, such as the Cookson Street - Talbot Road roundabout as depicted in the inset map in Figure 3, as well as the junction at Topping Street – Talbot Road – Dickson Road where high vehicle volume and congestion due to traffic control is likely to contribute to elevated NO₂ concentrations.

Figure 3: Modelled NO₂ concentrations across Blackpool in 2022



Emissions source apportionment was calculated for Blackpool using the most recent emission maps published by the National Atmospheric Emissions Inventory (NAEI)¹². This data provides source emissions aggregated to a 1 km² grid covering the Blackpool AQMA. Figure 4 shows that 54% of NO_x emissions in Blackpool are sourced from road transport, followed by 29% from commercial and domestic combustion, which is where Blackpool Council can focus their AQAP measures.

Figure 4: Primary emissions (NO_x) source apportionment for Blackpool AQMA



(*) Other relates to emissions from agriculture, forestry and land use change, and combustion in energy production and transformation.

(**) The following sectors contribute <1% to NO_x emissions: production processes, waste treatment and disposal, solvent use, nature, other

As road transport was the largest source of NO_x emissions in Blackpool AQMA, a detailed source apportionment study was carried out at each monitoring site located in the AQMA in 2022 to understand the percentage contributions of road vehicle types to NO_x emissions.

Figure 5 shows the NO_x source apportionment for all road transport and background sources at roadside monitoring sites within Blackpool AQMA for the baseline fleet in 2022. NO_x source apportionment by background and vehicle types in absolute modelled concentrations (µg/m³) and percentage contribution (%) are displayed in further detail in Table 1 and Table 2, respectively.

¹² NAEI, Emissions Maps 2020. https://naei.beis.gov.uk/data/map-uk-das?pollutant_id=6&emiss_maps_submit=naei-20230611212042

Figure 5: Stacked bar chart showing NOx source apportionment for all road transport and background for monitoring locations within Blackpool AQMA (%), for the baseline fleet, 2022



Table 1: NOx source apportionment by background and vehicle type (road transport emissions from major roads) at monitoring locations within Blackpool AQMA ($\mu\text{g}/\text{m}^3$) for the baseline fleet, 2022 (modelled NO₂ concentrations derived from the NOx to NO₂ calculator)

Site ID	Modelled background NOx concentration ($\mu\text{g}/\text{m}^3$)	Modelled road transport NOx concentration broken down by vehicle type ($\mu\text{g}/\text{m}^3$)								Total modelled NOx concentration ($\mu\text{g}/\text{m}^3$)	Total modelled NO ₂ concentration ($\mu\text{g}/\text{m}^3$)	Total monitored NO ₂ concentration ($\mu\text{g}/\text{m}^3$)
		Petrol cars	Diesel cars	Petrol LGVS	Diesel LGVs	Rigid HGVs	Arctic HGVs	Buses/coaches	Motorcycles			
DF1	10.96	0.52	6.08	0.002	1.55	0.22	0.01	2.95	0.01	22.29	14.07	17.6
DF2	10.99	0.46	5.23	0.002	1.28	0.34	0.06	4.02	0.01	22.40	13.99	19.18
DF6	11.23	2.36	17.45	0.01	6.07	0.71	0.05	2.32	0.03	40.22	23.33	20.26
DF7	10.48	0.84	8.24	0.003	2.16	0.25	0.02	0.82	0.01	22.82	14.57	16.64
DF8	11.07	1.19	10.58	0.004	3.15	0.40	0.06	0.69	0.02	27.17	16.87	14.85
DF9	11.20	1.60	13.05	0.01	4.26	0.67	0.05	2.80	0.03	33.66	19.94	16.94
DF10	11.20	1.26	11.06	0.004	3.38	0.66	0.01	4.18	0.02	31.77	18.82	16.15
DF12	11.29	1.03	9.28	0.004	2.80	0.37	0.004	2.44	0.02	27.23	16.7	16.13
DF14	11.39	1.02	9.66	0.003	2.40	0.44	0.03	1.86	0.01	26.80	16.52	21.72
DF15	11.34	0.66	7.43	0.002	1.37	0.23	0.04	1.20	0.01	22.29	14.23	19.69
DF16	11.25	1.82	14.85	0.01	4.47	0.71	0.08	0.59	0.01	33.80	20.27	17.51
DF18	11.13	0.56	6.33	0.001	1.18	0.14	0.03	1.30	0.01	20.68	13.37	18.35

Table 2: NO_x source apportionment by background and vehicle type (road transport emissions from major roads) at monitoring locations within Blackpool AQMA (%) for the baseline fleet, 2022 (modelled NO₂ concentrations derived from the NO_x to NO₂ calculator)

Site ID	Modelled background NO _x concentration (%)	Modelled road transport NO _x concentration broken down by vehicle type (%)								Total modelled NO _x concentration (µg/m ³)	Total modelled NO ₂ concentration (µg/m ³)	Total monitored NO ₂ concentration (µg/m ³)
		Petrol cars	Diesel cars	Petrol LGVS	Diesel LGVs	Rigid HGVs	Arctic HGVs	Buses/coaches	Motorcycles			
DF1	49.2%	2.3%	27.3%	0.01%	7.0%	1.0%	0.04%	13.2%	0.03%	22.29	14.07	17.60
DF2	49.1%	2.1%	23.3%	0.01%	5.7%	1.5%	0.3%	17.9%	0.1%	22.40	13.99	19.18
DF6	27.9%	5.9%	43.4%	0.02%	15.1%	1.8%	0.1%	5.8%	0.1%	40.22	23.33	20.26
DF7	45.9%	3.7%	36.1%	0.01%	9.4%	1.1%	0.1%	3.6%	0.1%	22.82	14.57	16.64
DF8	40.7%	4.4%	39.0%	0.01%	11.6%	1.5%	0.2%	2.5%	0.1%	27.17	16.87	14.85
DF9	33.3%	4.8%	38.8%	0.02%	12.7%	2.0%	0.1%	8.3%	0.1%	33.66	19.94	16.94
DF10	35.2%	4.0%	34.8%	0.01%	10.7%	2.1%	0.03%	13.1%	0.1%	31.77	18.82	16.15
DF12	41.4%	3.8%	34.1%	0.01%	10.3%	1.4%	0.02%	8.9%	0.1%	27.23	16.70	16.13
DF14	42.5%	3.8%	36.0%	0.01%	9.0%	1.6%	0.1%	6.9%	0.03%	26.80	16.52	21.72
DF15	50.9%	3.0%	33.3%	0.01%	6.1%	1.1%	0.2%	5.4%	0.04%	22.29	14.23	19.69
DF16	33.3%	5.4%	43.9%	0.02%	13.2%	2.1%	0.2%	1.8%	0.04%	33.80	20.27	17.51
DF18	53.8%	2.7%	30.6%	0.01%	5.7%	0.7%	0.1%	6.3%	0.04%	20.68	13.37	18.35

The source apportionment results show that diesel cars (average 35.1%) were the largest contributing vehicle type to NO_x emissions at diffusion tube monitoring sites in Blackpool AQMA, followed by diesel LGVs (average 9.7%) and buses/coaches (7.8%).

1.7 Required Reduction in Emissions

1.7.1 NO_x and NO₂ emissions reductions

In 2022, there were no monitoring sites which measured the annual mean NO₂ concentration to be above the national air quality objective of 40 µg/m³ in Blackpool. Therefore, no required reduction in NO_x emissions has been calculated.

1.7.2 Scenario Modelling

To understand the impact that different policy measures could have on air quality in Blackpool, three scenarios were modelled using the 2022 baseline model to calculate the likely reduction in emissions. The modelled scenarios are outlined below:

1. Upgrade Blackpool Council fleet to low-emission alternatives
2. Upgrade Blackpool Council bus fleet to electric vehicles (EVs)
3. Model a reduction in cars to represent a modal shift to public transport and active travel

For each scenario, pollutant emissions were calculated and compared to the baseline scenario to understand the impact of the measure on local air quality in Blackpool. The impact of Scenarios 2 and 3 were also shown on NO₂ concentrations across monitoring sites in Blackpool. The three scenarios are detailed further below.

Scenario 1: Upgrading Blackpool Council fleet

This scenario assumes the purchase of low emission vehicles to replace existing Blackpool Council-owned cars, LGVs (inclusive of minibuses), and HGVs. It was assumed that the oldest vehicles would be upgraded first and that vehicles would be upgraded to the best available emission standard (either Euro 6d or EV for cars and LGVs depending on the scenario, and Euro 6 for HGVs). For each scenario, total annual emissions of NO₂, PM₁₀, PM_{2.5}, and CO₂ in tonnes per year were calculated to demonstrate the emissions reductions that could be achieved within Blackpool AQMA

by upgrading council-owned vehicles due for replacement with low-emission alternatives. Emission reductions were calculated using the Emissions Factors Toolkit (EFT) (v.11.0).

The analysis was performed using current Blackpool Council fleet data which details vehicle make/model, registration number, registration year, fuel type, and mileage of the vehicle fleet between 01/08/2022 and 31/03/2023. The mileage was extrapolated to be representative of a 12-month period. This information was applied to quantify the impact of the following scenarios:

1. **'Baseline' scenario** – Annual emissions from the current council fleet comprising of 92 vehicles

Vehicle Standard	Car	LGV	HGV
Euro 3	0	0	2
Euro 4	1	1	0
Euro 5	0	26	6
Euro 6	7	46	3

2. **'Anticipated' scenario** – in total 13 vehicles were upgraded, representing 14.1% of the total Council fleet. Two anticipated scenarios were modelled to compare the impacts of upgrading the cars and LGVs in the fleet to new petrol/diesel vehicles (A) and electric vehicles (B):

- A – upgrade all vehicles registered before 2014 to Euro 6 / Euro 6d, depending on vehicle type
- B – upgrade all vehicles registered before 2014 to EV or Euro 6, depending on vehicle type

Vehicle Standard	Car	LGV	HGV
Euro 3	0	0	0
Euro 4	0	0	0
Euro 5	0	20	3
Euro 6	7	46	8
Euro 6d (Scenario A) or EV (Scenario B)	1	7	NA

3. **'Ambitious' scenario** – in total 36 vehicles were upgraded, representing 39.1% of the Council fleet. Two ambitious scenarios were modelled to compare the impacts of upgrading the cars and LGVs in the fleet to new petrol/diesel vehicles (A) and EVs (B):

- A – upgrade all vehicles registered before 2017 to Euro 6 / Euro 6d, depending on vehicle type
- B – upgrade all vehicles registered before 2017 to EV or Euro 6, depending on vehicle type

Vehicle Standard	Car	LGV	HGV
Euro 3	0	0	0
Euro 4	0	0	0
Euro 5	0	0	0
Euro 6	7	46	11
Euro 6d (Scenario A) or EV (Scenario B)	1	27	NA

Results

The results of Scenario 1: Upgrading Blackpool Council fleet are outlined in Table C-1 (Appendix C) and show the total annual pollutant emissions for NO_x, PM_{2.5}, PM₁₀, and CO₂ in tonnes per year.

For all scenarios, upgrading the Council vehicle fleet had the largest impact on NO_x compared to PM_{2.5} and PM₁₀ in terms of percentage change in emissions.

For the 'Anticipated' scenarios, upgrading all vehicles registered before 2014 to new petrol/diesel equivalents resulted in an emissions saving of 147.6 tonnes per year of NO_x, 2.2 t/y of PM_{2.5} and 2.2 t/y of PM₁₀, representing a percentage change of -34.3%, -13.9% and -8.3%, respectively. The upgrade also saves 757.7 t/y of CO₂.

For the 'Anticipated' scenarios, the upgrade to EVs (-36.2%) resulted in a larger NO_x pollutant reduction compared to the upgrade to Euro 6d (-34.3%). For the 'Ambitious' scenarios, the upgrade to EVs (-75.9%) resulted in a larger NO_x pollutant reduction compared to the upgrade to Euro 6d (-69.5%). The same trend applies for PM_{2.5}, PM₁₀, and CO₂.

Scenario 2: Upgrade Blackpool Council bus fleet to electric vehicles

Blackpool Council and Blackpool Transport Services have collaborated to gain funding under round two of the Government's Zero Emissions Bus Regional Areas (ZEBRA) scheme. This will provide state-of-the-art electric buses together with a depot rebuild and refurbishment.

Scenario 2 aims to understand the impact that this may have on air quality in the Blackpool AQMA through modelling of the NO₂ concentration reduction at monitoring sites within and in close proximity to the Blackpool AQMA as a result of upgrading a proportion of the bus fleet to EVs. Two scenarios were modelled to compare the impact of upgrading different proportions of the current bus fleet:

1. **'Medium' scenario (2a)** – 50% of buses upgraded to electric.
2. **'High' scenario (2b)** – 75% of buses upgraded to electric.

Results

The results of Scenario 2 are displayed in Table C-2 and show the impact of the bus upgrade on NO₂ concentrations at monitoring sites within and in close proximity to the Blackpool AQMA.

Both scenarios resulted in a reduction in NO₂ concentrations across all sites. The 'Medium' scenario (2a), where 50% of the bus fleet is electrified, results in an average 3.40% reduction in NO₂ at the Blackpool AQMA monitoring sites. The 'High' scenario (2b), where 75% of the bus fleet is electrified, results in an average 5.12% reduction in NO₂ at the Blackpool AQMA monitoring sites.

For both scenarios, the greatest reduction in NO₂ concentration was observed at DF2, 58 Abingdon Street (Medium scenario: 13.1 µg/m³, -6.7% change; High scenario: 12.6 µg/m³, -10.1% change), followed by DF1, 92 Topping Street (Medium scenario: 13.4 µg/m³, -5.1% change; High scenario: 13.0 µg/m³, -7.6% change) and DF10, Springfield Road Market (Medium scenario: 18.0 µg/m³, -4.5% change; High scenario: 17.6 µg/m³, -6.8% change).

Scenario 3: Model a reduction in cars to represent a modal shift to public transport and active travel

Modal shift to active travel and public transport are a common theme across the list of shortlisted measures, as well as in the current Blackpool Council plans and policies such as the Active Lives Strategy, Local Neighbourhood Plans, Local Transport Plans, and the Town Centre Strategy.

Scenario 3 models the impact of a decrease in car volume to represent a modal shift towards public transport and active travel. Impacts are again shown in terms of NO₂ concentration reductions at the monitoring sites within and in close proximity to the

Blackpool AQMA. The following three scenarios were modelled to provide a comparison of the impact of different magnitudes of shift towards public transport and active travel.

- **'Low' scenario (3a)** – 5% car volume decrease
- **'Medium' scenario (3b)** – 10% car volume decrease
- **'High' scenario (3c)** – 15% car volume decrease

Results

The results of Scenario 3 are displayed in Table C-2 in terms of annual average NO₂ concentration change at monitoring locations.

The 'Low' scenario (3a), where 5% of car volume is reduced, results in an average 1.32% reduction in NO₂ at the Blackpool AQMA monitoring sites. The 'Medium' scenario (3b), where 10% of car volume is reduced, results in an average 2.67% reduction in NO₂ at the Blackpool AQMA monitoring sites. The 'High' scenario (3c), where 15% of car volume is reduced, results in an average 4.00% reduction in NO₂ at the Blackpool AQMA monitoring sites.

For all scenarios, the greatest reduction in NO₂ concentration was observed at DF16, 48 Cookson Street, (Low scenario: 20.0 µg/m³, -1.8% change, Medium scenario: 19.6 µg/m³, -3.6% change; High scenario: 19.2 µg/m³, -5.3% change), followed by DF6, 46 Dickson Road (Low scenario: 22.9 µg/m³, -1.7% change, Medium scenario: 22.5 µg/m³, -3.5% change; High scenario: 22.1 µg/m³, -5.2% change) and DF9, Springfield (Promenade) (Low scenario: 19.6 µg/m³, -1.6% change, Medium scenario: 19.3 µg/m³, -3.2% change; High scenario: 19.0 µg/m³, -4.8% change).

1.8 Key Priorities

The most significant source of NO_x emissions in Blackpool AQMA is road transport. As discussed in Section 1.6, the source apportionment results show that diesel cars (average 35.1%) were the largest contributing vehicle type to NO_x emissions at diffusion tube monitoring sites in Blackpool AQMA, followed by diesel LGVs (average 9.7%) and buses/coaches (7.8%).

The key priorities for this AQAP have been determined by Blackpool Council and the AQAP Steering Group.

- Priority 1 – Reducing NO₂ concentrations in the Blackpool AQMA and providing evidence to demonstrate this to allow the AQMA to be revoked in the future.
- Priority 2 – Improving air quality communications and providing evidence for revocation of the Blackpool AQMA to ensure our residents and visitors are informed about local air quality.
- Priority 3 – Reducing emissions of particulate matter PM_{2.5}.

Development and Implementation of Blackpool Council AQAP

1.9 Consultation and Stakeholder Engagement

In developing this AQAP, we have worked with other local authorities, agencies, businesses, and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed below.

- The Secretary of State
- The Environment Agency
- The highways authority
- All neighbouring local authorities
- Other public authorities as appropriate, such as Public Health officials
- Bodies representing local business interests and other organisations as appropriate

1.10 Steering Group

The Blackpool Council AQAP Steering Group was established in March 2023.

An online workshop was held for the Steering Group to provide an overview air quality in Blackpool, and to discuss the longlist of AQAP measures. This included discussion of the potential measures which had been compiled from existing regional and local policy as well as discussion on future ambition measures.

Following the workshop, the longlist of AQAP measures was refined to the shortlist.

1.1 Public Consultation

In addition to the above engagement, a public consultation took place to seek views on the overall vision and the action proposed in the draft AQAP. The consultation was open between 17th July and 20th September 2023. There were 119 online responses; six of which were from businesses.

Overall, 52% of residents agreed air quality is an important issue and 66% of businesses agreed.

Residents generally agreed with the overall vision for the AQAP and agreed with the actions being proposed. Agreement was strongest for reducing emissions from new developments, improving public information, and for improving green infrastructure.

The survey asked for additional actions to be suggested which included: planting trees, encouraging remote working, relocating offices away from town centre, improving cycle infrastructure, improve signage for pedestrians and increasing CCTV coverage on buses. Most of these actions are aligned to the six priority areas, or already listed within the action plans.

The full report on the consultation can be found in Appendix A.

AQAP Measures

Table 3 shows the Blackpool Council AQAP measures which were outlined by the AQAP Steering Group. It contains:

- a list of the actions that form part of the plan;
- the responsible individual and departments/organisations who will deliver this action;
- estimated cost of implementing each action (overall cost and cost to the local authority);
- expected benefit in terms of pollutant emission and/or concentration reduction
 - “Low” – measures with a low target pollution reduction in the AQMAs are considered “soft” actions which may not directly cause reductions of pollutants but may indirectly result in a positive impact on air quality. Effectiveness of the measures may be constrained by engagement and/or enforcement
 - “Medium” – measures with a medium target pollution reduction in the AQMAs include “technical” measures which will directly cause reductions of pollution, but the effectiveness of the measures may be constrained by engagement and/or enforcement
 - “High” – measures with high target pollution reduction in the AQMAs include “technical” actions over which the lead authority has control and are unlikely to be constrained by engagement and/or enforcement;
- the timescale for implementation; and
- how progress will be monitored.

NB: Please see future ASRs for regular annual updates on implementation of these measures.

Table 3: Air Quality Action Plan Measures

Category	Measure	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
Traffic Management	Optimise Blackpool's traffic network	Under implementation	Ongoing				Implementation	Medium. Projects delivered optimising the traffic network will likely reduce exhaust emissions of NOx and PM, as a result of reduced congestion and idling.	Delivery of traffic network optimisation projects. Reduction in congestion.	Two integrated schemes implemented in Blackpool focusing on variable message signage, traffic guidance and queue management.	Action will look to continue traffic management work and align with the Government's Transport Technology Forum on future projects.
Alternatives to private vehicle use	Implement the Enhanced Bus Partnership Scheme & Plan	Under implementation	2028				Implementation	Low. The Enhanced Bus Partnership will not directly reduce pollutant emissions, but paves the way for aligned efforts by bus service providers to reduce their emissions.		The Enhanced Bus Partnership Scheme is now in place, and the Enhanced Bus Partnership Plan was published in January 2023. A new officer for this Scheme was recently appointed.	Blackpool did not receive Bus Service Improvement Plan (BSIP) funding, but will still update the BSIP annually. The Plan will be reviewed should any funding become available.
Promoting Low Emission Transport	Blackpool Transport Services electrification / support round two of ZEBRA work	Under implementation	2025	Department for Transport's Zero Emission Bus Regional Area (ZEBRA) fund	Partially funded		Implementation	High. Introduction of zero-emission buses to replace traditional buses in the BTS fleet will directly reduce exhaust	No. of zero-emission buses introduced into the fleet.	The business case was submitted to the Department for Transport in January 2022.	115 new buses are set to be introduced over a 3-year period.

								emissions of NOx and PM.			
Promoting Low Emission Transport	Deliver the vision in Blackpool's Electric Vehicle Strategy	Under implementation	2027				Implementation	Low. Provision of EV charging and other incentives to switch to EVs will not directly reduce air pollutant concentrations, but will help facilitate EV uptake.	Proportion of EVs in the fleet travelling in and around Blackpool / no. of EVs owned by residents in Blackpool.	Blackpool's EV Strategy was adopted in February 2023.	Provision of EV charging infrastructure will be demanded.
Promoting Low Emission Transport	Provision of EV charging infrastructure throughout Blackpool	Under implementation	2027				Implementation	Low. Provision of EV charging in Blackpool will not directly reduce air pollutant concentrations, but will help facilitate uptake of EVs.	No. of EV charge points installed across Blackpool.	Blackpool's EV Strategy was adopted in February 2023.	Provision of EV charging infrastructure will be demanded.
Promoting Low Emission Transport	Move Council Fleet away from Petrol/Diesel towards alternative fuels such as Electric or Hydrogen	2024	Ongoing				Planning	Medium. Upgrading vehicles in the Council's fleet will directly reduce exhaust emissions of NOx and PM, however, the scale of improvements may not be high.	Vehicles in the Council fleet replaced with low-emission alternatives.	Looking at a new telematics system for all fleet vehicles, focused on driver behaviour.	Upgrades to fleet are dependent on funding. There are also requirement for certain vehicles that may mean they cannot be upgraded.
Promoting Travel Alternatives	Publish Local Cycling and Walking Infrastructure Plan (LCWIPs)	Under implementation	2023	Active Travel England's Capability and Ambition Fund	Partially funded		Implementation	Low. The LCWIP will not directly reduce pollutant emissions, however, should encourage more	LCWIP published.	LCWIP Stage 2 Engagement taking place during Spring 2023. Update to plans due to	Blackpool falls within the Fylde Coast LCWIP.

								people to walk/cycle more often, indirectly improving air quality.		take place Summer 2023.	
Promoting Travel Alternatives	Adopt a 'pedestrian first' approach to planning during the Town Centre realignment	Under implementation		Safer Roads Fund	Partially funded		Implementation	Low. Making the Town Centre more attractive to pedestrians will not directly reduce pollutant emissions, however, should encourage more people to journey to the Town Centre on foot more often, indirectly improving air quality.	Projects implemented in the Town Centre that are beneficial to pedestrians.	Town Centre Quality Corridors scheme was implemented, delivering improvements to the town centre public realm; Church Street, Cookson Street, Dickson Road, Topping Street, Edward Street, Deansgate and Talbot Road were identified as priority areas for this investment.	Implementing measures in the Town Centre Action Plan.
Promoting Travel Alternatives	Enforce pedestrianisation within the Town Centre	2023	Ongoing	Safer Roads Fund			Planning	Medium. Enforcing pedestrianisation in relevant areas will directly reduce exhaust emissions of NOx and PM, however, the success of this measure depends on the enforcement.		Pedestrianisation already on parts of Market Street, Church Street, Corporation Street, and Talbot Road.	Consider enforcement cameras to prevent illegal vehicles going up Talbot Road where the tramway is.
Promoting Travel Alternatives	Encourage and support local employers and education establishments to develop	2024	Ongoing				Planning	Low. Supporting development of these initiatives will not directly reduce pollutant	No. of local establishments producing active travel plans / workplace	The Living Streets initiative works with schools and businesses in	Focus on active travel plans and incentives provided by businesses and educational

	active travel plans, workplace promotions and journey planning							emissions, however, should encourage local establishments to make changes to their travel, indirectly improving air quality.	promotions / journey planning.	Blackpool on active travel.	establishments to encourage commuting via active travel.
Promoting Travel Alternatives	Work with businesses and educational establishments to implement travel plans	2024	Ongoing				Planning	Medium. Implementation of travel plans can directly reduce pollutant emissions; however, success of this measure depends on uptake.	No. of local establishments implementing travel plans.	At the concept stage.	Wider travel plans to encourage mode shift, hybrid working, etc. Potential to build on Living Streets' work on active travel.
Promoting Travel Alternatives	Develop Modal Shift Action Plan	2024	2024				Planning	Low. Development of a Modal Shift Action Plan will not directly reduce pollutant emissions, but may encourage people to change their travel habits, indirectly improving air quality.	Development and publication of the action plan.	Initial discussions between Active Blackpool and Strategy and Climate.	Focus on incentivisation and encouraging mode shift towards public transport / active travel.
Promoting Travel Alternatives	Bike storage in Blackpool Town Centre						Planning	Low. Increasing bike storage will not directly reduce pollutant emissions, however, should encourage more people to cycle into the Town Centre more	No. of bike storage spaces available in the Town Centre.	There is already some bicycle parking in the Town Centre, but research is being carried out into the best option for additional, secure storage.	Implementation will be dependent on funding.

								often, indirectly improving air quality.			
Promoting Travel Alternatives	Improve facilities on the cycle / footpath network such as benches and toilets						Planning	Low. Improving these facilities will not directly reduce pollutant emissions, however, should encourage more people to walk/cycle more often, indirectly improving air quality.	No. of new facilities / upgraded or replaced facilities on the cycle / footpath networks.		Implementation will be dependent on funding.
Promoting travel alternatives	Improve the level of provision of multi-user routes						Planning	Low. Increasing multi-user routes will not directly reduce pollutant emissions, however, should encourage more people to walk/cycle more often, indirectly improving air quality.	No. of additional multi-user routes created.		There may be limitations on which routes the Council can make multi-user, including due to who is responsible for the road(s). Make use of DfT guidance on cycle infrastructure design.
Policy Guidance and Development Control	Protect and enhance Green Infrastructure in streetscapes, quality corridors and town centre	Under implementation	Ongoing				Implementation	Low. While there is some evidence that plants / trees absorb air pollutants, the main purpose of this measure is to encourage people to walk / cycle more often, and also to reduce pollution exposure by	Maintenance and restoration activities of green areas in Blackpool.	The Tree Strategy's ongoing actions include reviewing planting locations, encouraging the planting of trees on private land, and protecting existing trees and woodland.	Aligns with the Tree Strategy 2020-2030, Green and Blue Infrastructure Plan 2019-2029, and the Town Centre Action Plan.

								creating barriers to roadside pollution.			
Policy Guidance and Development Control	Incorporate creation of new green infrastructure into the Town Centre Strategy Update	Under implementation					Implementation	Low. While there is some evidence that plants / trees absorb air pollutants, the main purpose of this measure is to encourage people to walk / cycle more often, and also to reduce pollution exposure by creating barriers to roadside pollution.	No. of new green infrastructure projects in the Town Centre.	Public realm improvements in the Town Centre are ongoing, and with respect to green infrastructure may include the introduction of trees, planters, and other vegetation suitable for Blackpool.	Aligns with the Tree Strategy 2020-2030, Green and Blue Infrastructure Plan 2019-2029, and the Town Centre Action Plan.
Policy Guidance and Development Control	Consider green infrastructure opportunities for reduction of residual emissions		Ongoing				Planning	Medium. Restoration and planting of broad-leaved woodland can help to reduce background concentrations of pollutants.	No. of restoration and planting projects for broad-leaved woodland.	At the concept stage.	Aligns with the Tree Strategy 2020-2030.
Policy Guidance and Development Control	Work with developers to ensure electric vehicle charging is included in all new developments	Under implementation	Ongoing				Planning	Low. Provision of EV charging and other incentives to switch to EVs will not directly reduce air pollutant concentrations, but will help facilitate EV uptake.	Proportion of new developments with EV charging included.	There is a requirement for EV provision in all developments as well as planning for future EV levels (Local Plan Part 2 adoption).	
Policy Guidance and	Preparation of a Summary Document (or	2024	2024				Planning	Medium. The document will set out	Preparation and publication of	Discussions have been held within the	The document will ensure developers

Development Control	similar) on Control of Dust and Emissions during Construction and Demolition							requirements for control of dust emissions during construction / demolition, which will directly reduce PM emissions. However, success will be limited by enforcement.	document. No. of developments that have made use of the document.	Environmental Protection team about what this might look like.	understand what is expected of them to control dust emissions.
Policy Guidance and Development Control	Deliver the Cosy Homes In Lancashire programme	Under implementation	Ongoing				Implementation	Medium. The programme helps household to access the Green Home Grant which is put towards installation of insulation, upgraded windows and doors and renewable technologies; these all help to reduce domestic emissions of NOx and PM (as heating needs decrease), but success depends on uptake.	No. of homes that have received support from Cosy Homes in Lancashire.	The Cosy Homes in Lancashire programme is in place and the team are currently based in Public Health at Blackpool Council. In 2021/22 and 2022/23 Cosy Homes helped 2400 households to access the Green Home Grant.	Cosy Homes in Lancashire was developed by the 14 Local Authorities in Lancashire following a comprehensive energy efficiency study commissioned by Blackpool Public Health in 2013. The scheme has the backing of all the Chief Executives and the Directors of Public Health.
Policy Guidance and Development Control	Develop a bonfire policy	2024	2024				Planning	Low. Development of a bonfire policy will not directly reduce pollutant emissions, but may encourage people to change their open burning habits, indirectly	Development and publication of policy.	To be produced by the Environmental Protection team.	Focus will be on education around the issues and impacts, rather than an outright ban.

								improving air quality.			
Policy Guidance and Development Control	Support improved insulation of all housing		Ongoing				Planning	Medium. Improving insulation helps to reduce domestic emissions of NOx and PM (as heating needs decrease), but success depends on uptake.	No. of houses with improved insulation.		
Policy Guidance and Development Control	Review of air quality monitoring locations	2023	2024				Planning	Low. Reviewing / amending the monitoring locations will not directly improve air quality, but will support delivery of other air quality actions that will help to improve air quality.	Review of monitoring locations completed. Changes made to diffusion tube locations.		Review of existing locations and re-allocation of monitoring resource to new locations of relevant exposure.
Policy Guidance and Development Control	Investigate potential for a sensor study	2024	2024				Planning	Low. A sensor study will not directly improve air quality, but could support delivery of other air quality actions that will help to improve air quality.	Delivery of a sensor study.	At the concept stage.	Potential for a low-cost sensor study will be considered, for example, to measure the impact of air quality action(s).
Public Information	Engagement with schools / youth groups	Ongoing	Ongoing				Completed	Low. Engagement will not directly reduce pollutant emissions, but may encourage people to	No. of local educational establishments engaged with.	The Living Streets initiative works with schools and businesses in Blackpool on active travel.	Consider further engagement by Strategy and Climate and Environmental Protection teams with schools and

								change their habits, indirectly improving air quality.			youth groups. Can link to other communications activities (such as AQ monitoring data).
Public Information	Engagement with local businesses	Ongoing	Ongoing				Completed	Low. Engagement will not directly reduce pollutant emissions, but may encourage people to change their habits, indirectly improving air quality.	No. of local businesses engaged with.	The Living Streets initiative works with schools and businesses in Blackpool on active travel.	Consider further engagement by Strategy and Climate and Environmental Protection teams with local businesses. Can link to other communications activities (such as AQ monitoring data).
Public Information	Expand Air Quality Communications and align with other relevant topics	2023	Ongoing				Planning	Low. Air quality communications will not directly improve air quality, but will raise awareness and may encourage people to change their behaviour, indirectly improving air quality.		Air quality and climate emergency information is somewhat linked on the Council website. AQAP, AQS and ASR(s) will be available online once published.	Tailor communications to reach the widest audience; ensure co-benefits (e.g. climate, public health) are clear.
Public Information	Make information about local air quality more transparent and accessible	2023	Ongoing				Planning	Low. Making this information more accessible will not directly improve air quality, but will raise awareness and may	Availability of local air quality information to the public. E.g., monitoring data, documents.	AQAP, AQS and ASR(s) will be available online once published.	Focus on bringing air quality information online, especially air quality monitoring data, the new AQS, AQAP and ASR.

								encourage people to change their behaviour, indirectly improving air quality.			
Public Information	Highlight DEFRA's Solid Fuel Burning Campaign (Burn Better)	2023	Ongoing				Planning	Low. Highlighting the Burn Better campaign will not directly reduce pollutant emissions, but may encourage people to change their open burning habits, indirectly improving air quality.	No. of materials produced / disseminated.		The Burn Better campaign is available here: https://uk-air.defra.gov.uk/library/burnbetter/
Public information	Host / attend events to raise awareness and education around air quality	2025	Ongoing				Planning	Low. Engagement will not directly reduce pollutant emissions, but may encourage people to change their habits, indirectly improving air quality.	No. of events hosted / attended.	Currently starting to return to schools for informative sessions; looking to build on this long term.	

Appendix A: Consultation report

Air Quality Strategy Consultation Report

A consultation survey was available between 17th July 2023 and 20th September 2023. Paper copies were available in Family Hubs and Libraries as well as an online survey which was accessible on the Council's Engagement and Consultation page. No responses were received from paper surveys.

The survey collected 119 online responses; 6 of which were from businesses.

How important do you think the issue of air quality is in Blackpool?

Residents	Businesses
Very Important = 28%	Very Important = 33%
Important = 23%	Important = 33%
Not Important = 46%	Not Important = 33%
Skipped = 2%	Skipped = 0%

There is a difference in prioritisation between residents and businesses. The issues surrounding local air quality, the proposed strategy and its action plans, which aim to improve it, were marginally regarded as important. 52% of residents agreed air quality is an important issue and 66% of businesses agreed. However, it is fair to state the issue was viewed as relatively less important than other areas of statutory responsibility.

Please rank the priorities you feel will improve air quality in the air quality management zone the most.

Rank	Residents	Businesses
1 st	Offering alternative transport to private vehicles	Public information
2 nd	Traffic management	Offering alternative transport to private vehicles
3 rd	Promoting low emission transport	Traffic management
4 th	Promoting active travel	Promoting active travel
5 th	Policy Guidance and Development	Promoting low emission transport
6 th	Public information	Policy Guidance and Development

Residents and businesses responded that investing in transport was a top priority area which could improve local air quality and that policy guidance was a low priority.

	Agree or Strongly agree	Disagree or strongly disagree
13% more responses agreed with the overall vision	44%	30%
8% more responses agreed reducing emissions from traffic will improve air quality	46%	38%
As many responses agreed as disagreed that encouraging active travel will improve air quality	37%	37%
8% more responses agreed reducing emissions from heating and burning domestic fuels will improve air quality	44%	36%

29% more responses agreed reducing emissions from new developments will improve air quality	55%	25%
As many responses agreed as disagreed that more public information and communication will improve air quality	39%	39%
8% more responses agreed with the proposed actions to reduce traffic emissions	43%	35%
10% more responses agreed the proposed actions to encourage active travel	43%	33%
8% more responses agreed the proposed actions to reduce emissions from heating and burning domestic fuels	42%	34%
31% more responses agreed the proposed actions to improve green infrastructure	52%	21%
34% more responses agreed with the proposed actions to reduce emissions from new developments	53%	19%
34% more responses agreed with the proposed actions for more public information and communication	57%	23%
8% more responses agreed that these 6 priorities will help improve air quality in the management zone	37%	29%

Overall, residents agreed with the overall vision and agreed with the action plans. Agreement was strongest for reducing emissions from new developments improving public information and for improving green infrastructure. However as many responses agreed as disagreed that encouraging more active travel and providing more public information would improve local air quality.

Residents were also asked about actions they were likely to take to improve local air quality. Planting trees was a key behaviour. Interestingly despite the overall divide whether active travel will improve local air quality, a large minority of respondents reported they are likely to walk and cycle more in the local area.

What actions are you likely to take to improve air quality??

- 42% = Plant trees
- 37% = Walk or cycle for local journeys
- 29% = Improve home insulation
- 27% = Take the bus or tram more often
- 25% = Keep up to date with local air quality by visiting relevant websites regularly
- 24% = Reduce car idling
- 20% = Update home boiler to an ultra-low emission one
- 12% = Replace your current vehicle with an electric vehicle
- 10% = Car share
- 10% = Install an electric charging point at your property

The survey asked for additional actions to be suggested which included: planning trees, encouraging remote working, relocating offices away from town centre, improving cycle infrastructure, improve signage for pedestrians and increasing CCTV coverage on buses.

Green Infrastructure	<p><i>"Plant native trees"</i></p> <p><i>"Pay the Leader of the Council less and spend the money on trees"</i></p> <p><i>"How about an annual Blackpool prize in our town day or annual front garden tidy?"</i></p>
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Offering alternative transport to private vehicles	<p><i>"Continue to support working from home which stops the need for any car journey at all."</i></p> <p><i>"Work with Blackpool Transport to create new routes that service major employment areas, such as the Enterprise Zones and Industrial Estates."</i></p> <p><i>"Trams should have more routes added".</i></p>
Policy Guidance and Development	<p><i>"Relocate council workers from high pollution areas i.e. Town Centre, thus reducing commuting into town centre"</i></p> <p><i>"Ban bonfires on Guy Fawkes night and stop the international firework displays on the prom to reduce the significant smoke they create."</i></p> <p><i>"Ban garden fires whilst stopping the tip from being too selective on the types of rubbish being accepted."</i></p> <p><i>"Establish smoking/ vaping ban at tram and bus stops".</i></p>
Promoting active travel	<p><i>"Make the Promenade safer for cyclists by enforcing rule 56 of the Highway Code".</i></p> <p><i>"Talbot road is not at all cycle friendly. There are no cycle lanes, and the tram lines are not only a hazard to cross but also very slippery when wet. The cobbles on the road surrounding the roundabout is also make riding a road bike over very difficult. The new DWP building will undoubtedly bring more cyclists commuting in to the same area. More thought should be given to how the road is designed".</i></p>
Public information	<p><i>"Use local radio to give handy hints and tips."</i></p> <p><i>"Encourage rainwater harvesting for gardening and washing car. Waste less food. Reuse and recycle more. Buy second hand items, such as furniture. Plant and grow more own fruit/veg. Reduce utility consumption at home."</i></p> <p><i>"Highlight which pavements are designated for shared use and which are solely for pedestrian use".</i></p>
Traffic management	<p><i>"Blackpool has historically worked on slowing down traffic, but a focus on reversing this policy and maintaining traffic flow is more crucial than ever."</i></p> <p><i>"Sort out the zebra crossing on Talbot Road that brings the town to a standstill every weekend."</i></p> <p><i>"More cameras on bus lanes."</i></p>

The survey asked for overall comments, most comments related to electrification of private and public transport, this included some comments about London's Ultra Low Emissions Zone. A number of comments related to financial considerations of implementing the actions and personal finances to travel locally, particularly as costs to households are rising. A number of comments highlighted their satisfaction with Blackpool's current air quality.

Topic raised	Council Response
<p>Electrification of Vehicles</p> <p>16 comments relating to ULEZ zones, issues with lithium battery safety and recycling as well as costs for residents to adopt private EVs and private EV charging infrastructure themselves were raised.</p>	<p>The air quality strategy and its proposed action plans does not include an Ultra Low Emission Zone. Electrification of cars in the strategy is related to council owned vehicles rather than residents own vehicles.</p>
<p>Financial Considerations</p> <p>12 comments relating to the cost of electrification of the council fleet as well as costs to residents to be able to make changes to their transport or domestic heating circumstances in the current</p>	<p>The air quality strategy and proposed action plans did not include indicative costs; however the council has a successful track record in securing external funding from the national government for levelling up local infrastructure and improving public health.</p>

economic climate were raised.	
<p>Happy with current air quality</p> <p>10 comments relating to the coastal location offering comparatively better air quality than other towns and cities were raised.</p>	<p>The department for environment, food and rural affairs has set a challenge to every local authority to reduce the levels of particulate matter in the air. This is because air pollution impacts public health. Therefore whilst Blackpool's coastal location can help particulate matter levels disperse; there is still a statutory requirement to take actions further improve air quality.</p>

A detailed breakdown of the responses from 113 residents shows:

To what extent do you agree or disagree with...	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Skipped
The overall vision?	26%	18%	23%	18%	13%	3%
reducing emissions from traffic will improve air quality?	27%	19%	12%	20%	19%	3%
encouraging active travel will improve air quality?	19%	17%	25%	20%	17%	2%
reducing emissions from heating and burning domestic fuels will improve air quality?	19%	23%	18%	16%	20%	4%
reducing emissions from new developments will improve air quality?	26%	28%	18%	16%	11%	2%
more public information and communication will improve air quality?	20%	19%	19%	22%	18%	2%
the proposed actions to reduce traffic emissions?	24%	18%	21%	16%	20%	1%
the proposed actions to encourage active travel?	19%	24%	23%	13%	20%	1%
the proposed actions to reduce emissions from heating and burning domestic fuels?	19%	22%	24%	13%	20%	1%
the proposed actions to improve green infrastructure?	23%	29%	25%	12%	10%	2%
the proposed actions to reduce emissions from new developments?	26%	27%	27%	8%	12%	1%
the proposed actions for more public information and communication?	26%	31%	19%	7%	16%	1%
that these 6 priorities will help improve air quality in the management zone?	14%	22%	19%	15%	15%	14%

A detailed breakdown of the responses from 6 business shows:

To what extent do you agree or disagree with...	Strongly Agree or agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Skipped
The overall vision?	0%	50%	17%	0%	17%	17%
reducing emissions from traffic will improve air quality?	50%	0%	33%	0%	17%	0%
encouraging active travel will improve air quality?	50%	0%	17%	33%	0%	0%
reducing emissions from heating and burning domestic fuels will improve air quality?	50%	17%	0%	17%	17%	0%
reducing emissions from new developments will improve air quality?	33%	33%	33%	0%	0%	0%
more public information and communication will improve air quality?	17%	17%	33%	33%	0%	0%
the proposed actions to reduce traffic emissions?	17%	50%	17%	0%	17%	0%
the proposed actions to encourage active travel?	33%	17%	33%	17%	0%	0%
the proposed actions to reduce emissions from heating and burning domestic fuels?	33%	17%	17%	33%	0%	0%
the proposed actions to improve green infrastructure?	17%	33%	33%	17%	0%	0%
the proposed actions to reduce emissions from new developments?	33%	33%	17%	17%	0%	0%
the proposed actions for more public information and communication?	17%	50%	17%	17%	0%	0%
that these 6 priorities will help improve air quality in the management zone?	17%	33%	33%	17%	0%	0%

Full comments

Electrification = 16

Do not charge people to use their cars! We pay tax, the electric infrastructure is not good enough to support electric cars, we can not afford another tax on our lives. The council get enough tax from us already. My suggestion is to not agree to charge your local people to have freedom.

We pay enough road tax as it is. If you did this like most cities. It will put tourists off coming for holidays or day trips etc. Electric cars are a no from me.

Do not jump on the ULEZ bandwagon just to raise more money from motorists.

I worry about the way London has gone. This is going too far

I am buying an electric car to help but Blackpool council can't even be bothered to send an application form for having dropped kerb so I can have my electric charger put on the front of my house I have contacted highways department several times but no joy very very frustrated so how are we supposed to do our not when the council can't do theirs?
I work in the industry. Electric vehicles are totally unsuitable on cost, range and replacement. If you think a tax such as ULEZ is the answer then you are insane. It will not save lives, what will are getting Doctors back to work.
Would prefer the council to get the basics right before fancy electric cars.
Elec vehicles have Lithium (mined) batteries that have no safe disposal plan, so land fill it is. The batteries have a limited shelf life, are expensive to replace so people will replace the car and given the blackouts, even with charging ports, we haven't got the electricity to charge them. Crazy!
Why do politicians and councils think electric vehicles are the planet's saviour? Don't you realise the pollution and harm it takes to produce the batteries for these vehicles?
Never own an electric car. Dangerous
I am all for it but as someone with a disability relying on my car I find it harder to follow my beliefs. I hope to be able to move to a hybrid vehicle when my Motability lease is up.
Just so long as Blackpool Council don't make the same mistake as London and impose a punitive emissions tax. If an emissions tax is in the pipeline I would suggest £10 for a whole week, with Blackpool Transport contributing for its non- hybrid vehicles. That way the public would see that the Council is also contributing and it's not just 'Joe Public' who is paying the emissions tax. Cycle lanes would be a good idea as the majority of cyclists cycle illegally on the pavement and are a hazard to pedestrians.
Any ULEZ type options could be damaging to businesses.
Cheaper parking for hybrid and electric vehicles compared to diesel and petrol in Council car parks.
Electric cars are expensive and if you live on a terraced street with no off road parking how do you charge your vehicle? Should public EV charging points be put outside certain properties on a terraced street this will cause problems with neighbours insisting that it is their charging point and i believe this will cause disputes that may get out of hand.
Electric vehicle is out of reach financially so stuck with my diesel.

Financial considerations = 12

I think blackpool council should; 1 show us the people of blackpool how they have spent the government tory money labour council got, 2 how can people in low paid jobs pay fares for kids when cheaper in a car so making poverty for children ,3 show the people of blackpool the new contracts that are being sought to cut prices as the old contract have no competition and who decides who gets the contracts who get the benefits blackpool doesn't have bad pollution I believe the council looking to collect cash as they have overspend and need to be accountable.
Unfortunately with the current cost of living crisis, for me personally, using public transport is out of the question as it is too expensive. The issues around heating my house are more predominant, I couldn't afford to replace my boiler so again this isn't an option for me. I think a lot of people are in a similar situation so whilst this is an important issue being able to eat and heat take priority at the moment.
It's very important to improve air quality and reduce health problems associated with poor air quality, however this should not create any new burden on residents struggling

with the cost of living and reduced services. There is a risk that health and wellbeing improved by some measures would be diminished and cancelled out by any new financial burden on average families and all residents.
All these suggests are costly, therefore people are unlikely to be able to afford to implement them.
Would love to afford to tick all boxes!
None are cost effective for me.
I'd suggest introducing performance related pay to council tax whereby residents can withhold payment until the council actually improve demonstrably for all rather than jumping on bandwagons.
Much of this I'd like to do, but finances will dictate what I'm able to do.
Blackpool air quality must be good as it's by the sea, so to implement things like cycling/walking which are in place already, is a waste of money, especially when people are suffering with the cost of living crisis, is ridiculous, but with Blackpool council it'll go ahead anyway.
I don't support WEF puppets & policies.
I, and anybody else, for that matter cannot answer these questions without the cost to the council taxpayer being revealed. I seem to be one of the minority in this town paying the full amount.
Do the council have the money to replace all their vehicles with electric overpriced ones Blackpool is known as breezy Blackpool , so it seems to me that people in the town hall are jumping on the ULEZ bandwagon in order to spend money we don't have and more to the point cant afford right now.

Happy with current air quality = 10

None. The air quality in Bleekpool is better than most towns in the UK, just look it up on websites
Blackpool is on the west side of the UK with westerly winds being the most prevailing. Blackpool does not have a problem with air quality but it does have a problem with a virtue signalling council, that in one breath comes out with "strategies" like this then actively tries to sell dozens of acres of public land for profit pure hypocrisy!
I have not read anywhere that this is a problem in Blackpool. Is this bandwagon politics?
Air quality on the Fylde Coast is already excellent. Blackpool has always been famous for fresh air. There is no need to waste effort and money on any schemes to improve air quality. The only useful thing would be monitoring, to demonstrate just how clean the air is already on this coast.
We live in a seaside resort and have no industry and possibly one of the best air qualities in the country.
I believe the air quality here is better than other towns in the North West as we are next to the sea. To discourage vehicles will decrease tourism to the town, which is its main source of income. We are battered with fresh air, all the way from the Americas, on a daily basis. We don't need to do anything, except cut down on the amount of hot air from the Town Hall!
We should recognise that the coastal winds and gales that Blackpool is always exposed to will have a significant positive impact on air quality across the Blackpool area. Not so long ago in our past history people were sent to seaside towns to convalesce because the sea air would help improve their health, we have some of the cleanest air in

the country. My problem with the net zero narrative is that it is one side of the argument and this current government and most likely successive governments and local councils are hell bent on enforcing all these measures through because in my opinion it is virtue signalling, "look at what we are doing, aren't we great".

Air quality in Blackpool is hard to improve as it is already very good.

Living by the sea, we already have good air quality. Investment needs to be made on more important issues like crime, ANti Social Behaviour, improving services, improving employment opportunities, cleaner streets

I don't think you should be imposing any restrictions due to "a theory" we live by the Irish Sea not an inner city! Even if the small % of pollutants dose actually affect the health of a small amount Blackpool residents there are so many other things that affect our health and lives on a daily basis. Imposing tax and restrictions is not the way to treat the people you are paid to serve.

Read about as all 100 percent true

Town Centre regeneration / sprawl = 9

Slow moving traffic due to congestion causes more emissions so you need to keep the traffic flowing. Building new houses in areas that already have a problem with congestion for example, on the routes to Lytham / St Annes, should be stopped at least until the new road is completed. Instead of allowing the big developers to build overpriced new properties that a lot of Blackpool residents cannot afford, why not invest in improving the existing properties so they can be used for affordable or social housing?

It's not air quality we need to be tackling but redevelopment and regeneration of the town as a whole in its current state it is an undesirable location to visit it has lost its former glory of yesteryear how very sad. It has become a poor relationship of what once was a fabulous place to live and work in

promote non central zones to take pressure off the town centre such as Waterloo Road and Bond Street, Bispham and Cleveleys and Highfield Rd and cherry Tree Road

What a load of rubbish this is a holiday town do you propose to ask visitors to leave their vehicles at the end of the M55 and catch a bus?

Get a grip and sort yourselves out. Leave the motorist alone or we will continue to spend our money in St. Annes, Lytham and beyond. This is why I and other residents don't shop in the town centre - the roads conditions are atrocious, there's insufficient parking, the roadworks increase frustration - all resulting in the slow death of the centre.

I will no longer come into Blackpool if this is the decision of the town. I might also add I feel this will be the final nail in the seaside town which has become a disgrace over the last few decades. The local council should hang their heads in shame and stop wasting huge amounts of money on useless ideas and get back to supporting the town. There are far too many creaming off the town's resources

Blackpool Town centre is already a No Go area for many residents, as it is to difficult to park, to expensive to park or to difficult to navigate. This town is already struggling as a shopping destination like most other town centres in the country, your idea to pedestrianise the areas mentioned would just be a nail in the coffin for the town and many local businesses

Fresh air scheme will do nothing to improve the state of Blackpool just annoy residents who need to travel into the town centre. But if you want to make it deader than it already is carry on.

People like me already walk and cycle in restricting car access will not increase this and if you haven't noticed we have some dreadful weather to contend with on a frequent basis. People will just stay out of the town centre leaving it to the carless underemployed and holidaymakers.
--

Traffic = 8

The other high area on your imaginary data points is down by the Prom, the corridor ending behind the hotel and by the war memorial. Again, unsurprising given the appalling junctions, ridiculous traffic light sequencing and abundance of Landau's plying their trade, slowly (and perform u-turns randomly), on a stretch of road that the council reduced the width of, removed barriers in the name of pedestrianisation -which now means the day trippers just cross the road anywhere they like en masse. And you're surprised your actions have resulted in increased emissions?

Keep traffic moving, not sat idling in traffic jams created by a badly thought out traffic policy!
--

Don't close roads!

Not to introduce more traffic calming measures such as the Promenade as this causes more pollution to our air quality!
--

It's time to stop the motor vehicle being the priority - encourage use of alternatives and discourage using motor vehicles .
--

Reduce car idling

Stop speeding cars coming down Talbot road
--

Travelling by car is often worse than frustrating particularly between North and Central pier and back almost as far as Park Road. The regular heavy traffic and gridlock is a significant cause of vehicle emissions

Calls to take no actions = 8

None of the above

Stop virtue signalling

None of the above ; Long live fast petrol sports cars

Ignore all. My life my choice.

Remember that before the election in May Labour sent a letter saying no policy would be done in the near future! Lies, lies, lies!
--

None of the above

Waste of time and money.

These are all minor changes that won't impact a problem that isn't a problem!

National and international considerations = 7

As I fill in this questionnaire China India and the USA are still constructing coal fired power stations. Even if the UK went 100% carbon free tomorrow China alone will emit into the atmosphere in three weeks the total years saving made by the UK. The Mayor of London has ignored the fact that after 2 years the ULEZ programme has only reduced the air quality within inner London by 3%. The wind alone coming off the sea will keep Blackpool's air quality at a very comfortable level. The Mayor London will lose his seat and it will all be down to this indecent and forceful pressure to clean the air quality when it's not needed.
Clean air is important, but we already have that. We have multiple epidemics that need prior attention.
It may have skipped the councils notice but Blackpool is situated on the West coast of England. The prevailing wind in England comes from the South West and has done as long as the wind has blown. Could you please explain from whence cometh all this pollution. The USA maybe? I would bet that there are very few places in the country with air as clean.
The amount of air pollution we contribute is nothing compared to such countries are China, India, Russia and the USA to name but a few. Why should we not feel free to use our cars as and when we wish, because I feel sure that the pollution that other countries make goes into the atmosphere and floats all other the word.
None. The main problem with pollution is that there are too many humans on the planet. Less humans would lead to less pollution. Pop over to China or Northern Vietnam. They are huge polluters with burning millions of tons of brown coal. Doing any of the above is like emptying a swimming pool with a thimble.
The national government must decarbonise the grid for any of this to work

Pedestrianised areas = 6

Blackpool council should look at permanently pedestrianising the prom, pier to pier and the entire length of the prom (where there are illuminations) during the illuminations season when dark. There is so much congestion on the prom and is dangerous for both pedestrians and cyclists. Also, we should be encouraging people to cycle, walk or use trams to see the lights, rather than cars. This would also encourage tourists to hire bikes and promote local businesses.
Yes I believe Blackpool town centre should be close totally to Diesel/petrol vehicles with the exception of buses which are being changed to electric, bans should include taxi's, motorbikes, private cars, delivery vehicles should have open windows between 0600-0800 & 1800-2000, taxi ranks could be moved to the likes of Queen St, Dickson Rd & top of church st & the likes just outside the town centre, yes this would more than likely ruffle some feathers from the off set, however if this serious situation is ever to be addressed then serious action needs to be taken - local councils & central government need to get a back bone instead of sitting around a table discussing as it won't address the issue... action is what is needed.
No traffic on the prom at anytime seems like a good start to cut emissions. I dare you!
If a street/road is pedestrian only why isn't it; St John Square, Bank Hey Street, Cedar Square, To include electric bikes mopeds etc.?
Also we need more pedestrianisation and better pedestrian areas. Clean, safe and attractive.

Stop all motor transport into St John's square and near any pedestrian areas in Blackpool

Domestic emissions = 6

With a house with an energy rating of D, some double glazing where the seals have failed and a boiler over 10 years old, I have found Cosy Homes completely impossible to get any support, despite having medical issues.

I have seen many councils installing solar panels on social housing. This should be available to private dwellings also where the owners are not claiming means tested benefits but as a result of having to pay for all services, have little left in their pockets to cover green initiatives.
--

Blackpool is a cul de sac and the roads around it are permanently congested as the centre is largely pedestrian only. Fortunately we are blessed with the Westerly winds and relatively we have good air quality things to maintain and improve on this include: I believe you should be offering free grants to all people to upgrade housing stock to between A and C rates. Domestic homes and appliances are the biggest issue not vehicle use. Spend money on housing stock
--

I think it is absolutely ridiculous to have these types of projects before you have a solution. It is just another example of the cart before the horse. The counties infrastructure cannot possibly cope with electrification for all things such as cars. getting people to reduce what they burn in their homes IE wood burning stoves, fires is just going to close business down and put households in to more financial hardship as they will have to change their heating arrangements or what they burn which will no doubt be more expensive.
--

Blackpool is one of the most deprived wards in the UK the money is better spent on clearing poor housing and discarded rubbish and holding absentee landlords and tenants who make the environment unpleasant to account.

Target wood burners which are using polluting materials - pallets, old decking.

Actions residents are taking already = 5

None of the above as i have trees in my garden already so I'm doing my bit!

I do all I can, being disabled I can't walk or cycle any longer, or use public transport but I don't drive either. I get a lift or taxi when I need to go to medical appointments.
--

I had my home I insulation renewed within the last 12 years and also had solar panels installed on my roof 12 years ago. I have a modern gas boiler but don't use it much, I usually use electric heating when I need to.

I have 9 trees in my medium sized garden, no room for more.

Hybrid car

Tourism = 5

Yes if the council want to improve air quality that much scrap the illuminations!! To start picking little areas to improve air quality when the coast is barely a half mile away is a joke! Ban the illuminations!

People don't care to be honest. You don't really care for residents, as a council and the rest of the people that come to Bleekpool, come here for a good time not air quality.

Most pollution comes from traffic. Millions travel here by car how much of the pollution comes from them compared to locals. Where is that information? Why build so many car parks in the town centre? Why put an office block and university in the middle of the most
--

polluted areas. Why not put a large open green space where the closed shops and poor housing is.

We live at the seaside with plenty fresh clean air. You positively encourage millions of vehicles to visit the town to spend money and increase the population. Why is this council encouraging motorists to travel up and down the promenade for four months of the year in their polluting vehicles? Surely you as an elected body should be striving for a zero carbon footprint?

How do you reconcile this with Blackpool's biggest events and tourist attractions e.g. the lights?

Road maintenance = 5

As keen active cyclists in the 76 age group we need our roads, side roads and main roads to be made safe to actually cycle along. Biggest problem we find is broken road surfaces, with loose chippings, potholes, sunken grids and poor or none existent road markings.

Look after the residents and fix our residential roads and don't let abnb pop up in our residential streets

You want people to cycle more. Repair the roads properly. Not a bucket of tarmac filling potholes. Repair width of road then road will last longer. Not winter to winter. Improve oneway system for vehicles to cross town, more cameras on bus lanes i.e. Central drive from Albert Rd to Chapel St.

Long term, plan to build underpasses or overpasses to create fast North-South routes to bypass promenade congestion, especially between Gynn and Manchester Squares.

No more cycle paths waste of money like the one on Clifton drive, just causes more congestion which causes more pollution. I travel nationwide and in small towns like Blackpool it happens all the time, cycle lanes tend to add to pollution in some instances not reduce pollution, the one on Clifton drive is an absolute joke.

Signage = 4

Poorly planned and timer based traffic lights in Blackpool create so much standing traffic, this standing traffic creates more NOX than anything. Start to create fast flowing North-South through routes by replacing ineffective traffic lights with roundabouts or one way flows, replace all timer based traffic lights with intelligent electronic based ones where there is no room to build a roundabout.

ENCTS is being pushed further away, now 67, introduce a residents pass to give discounted travel and encourage bus and tram use.

Change traffic lights system so that pedestrians get to cross at each change of signal not once every two changes.

One main problem is the struggle to find parking. It is deeply disappointing that having asked a good few years ago about having the council car park availability online, there has been no progress. Live parking space data exists in a digital format to power the matrix signs around town. Having the same data on a publicly available platform could easily remove a percentage of people from the physical trial of finding a space causing congestion if not mayhem in the process, with some resorting to extreme measures and risk taking to get a space. On a number of occasions people have said to me that it will be years before they try Blackpool again after their experiences trying to park.

Mobility = 3

Pedestrian and cycle access is all well and good for some, but not at the expense of car

access for the old or disabled.
Some of us cannot even walk to a bus or tram stop
Mobility is an issue for us and bus services are slow and inaccessible

Green infrastructure = 3

It would also be nice if the council actually left some literal green areas.
More trees and green space ..
Plant more Trees in Residential areas like Claremont wards. We need Trees, it's better for the environment and peoples mental health, Trees have a lot of Benefits to residents who live here

General = 3

Ban fires in back gardens! Stop the tip from being too selective on the types of rubbish being accepted.
Everyone wants cleaner air, and that will be achieved over time using technology and educating people to walk and cycle more where practically possible, to keep vehicles well serviced and to remove vehicles from the road that are not.
Air quality is not an issue that needs action by local government. Manufacturers and natural cycle of replacement will perform the function the best, effort if wanted should be in funding the "scrapping " of older items with newer more efficient ones

Smoking and vaping = 2

Reduce the pollution from smoking and vaping in Blackpool particularly on public transport including at bus and tram stops.
Stopping people smoking and throwing there cigarettes on the floor.

Demography

28% of respondents did not identify their age band, and from the 72% of respondents that did, there were no responses from residents aged 16-24. Therefore, the results are not wholly representative of the general adult Blackpool population. 6 responses were from businesses of which 66% were businesses in the FY1 area and 50% were from hospitality / hotels. Therefore, the results are not wholly representative of Blackpool businesses.

For respondents who shared their demographic information. More than 1 in 5 responses were from the FY4 area. This survey was completed by slightly more males than females and mostly by residents who were aged over 55 years old. There was representation across a range of different sexual orientations. No respondents identified a non-white ethnic identity.

Postcode

17%	FY1
12%	FY2
15%	FY3
22%	FY4
9%	FY5
1%	FY6
0%	FY7
1%	FY8

4%	Outside FY.
20%	<i>Skipped</i>

Sex

40%	Male
32%	Female
7%	Preferred not to say
4%	Self-described
17%	<i>Skipped</i>

Age

8%	25-34
6%	35-44
10%	45-54
25%	55-64
19%	65-74
4%	75+
11%	Preferred not to say
18%	<i>Skipped</i>

Sexual Orientation

47%	Heterosexual / Straight
2%	Gay man
1%	Gay woman / Lesbian
1%	Other
10%	Self-described
19%	Preferred not to say
21%	<i>Skipped</i>

Ethnic identity

58%	White - includes English/Welsh/Scottish/Northern Irish/British Irish Gypsy or Irish Traveller, Any other White background
3%	Self-described
18%	Preferred not to say
19%	<i>Skipped</i>

Disability

10%	Disabled and limited a lot
12%	Disabled and limited a little
5%	Disabled and not limited
42%	Not Disabled
12%	Preferred not to say
19%	<i>Skipped</i>

Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Traffic Management	Produce a comprehensive, long-term parking strategy	During AQAP Steering Group Workshop, it was discussed that a long-term parking strategy is not a priority; however, the level of parking will be kept at where it is now. There is not considered to be a major excess or lack of parking in Blackpool, including within the AQMA.
Promoting Travel Alternatives	Consider opportunities to pedestrianise within the Town Centre	Amended to enforcing current pedestrianisation, rather than extending the pedestrianised areas, following the AQAP Steering Group Workshop. The priority will be to enforce what is already in place, particularly around George Street.
Policy Guidance and Development Control	Develop a solid fuels policy	
Public Information	Solid fuel burning public information campaign	Amended to 'Highlight DEFRA's Solid Fuel Burning Campaign (Burn Better)'
Policy Guidance and Development Control	Preparation of an Air Quality Supplementary Planning Document	Two Supplementary Planning Document actions were proposed, only taking forward the one on construction and demolition. This has been looked at previously, however, as Blackpool are below our target emissions and do not receive any concerns from the public when developments have taken place, it has not been explored further.

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
		General air quality requirements for developers are contained in the Local Plan policies.
Public Information	Provide dedicated messaging on what local people can do to help improve air quality	It was felt that this has been included within existing documents (such as the Air Quality Strategy and this Air Quality Action Plan) as well as the actions to expand the air quality communications and make information about local air quality more transparent and accessible.
Public Information	Develop an Air Quality Communications Plan	Following the AQAP Steering Group Workshop, this action was amended to 'Expand Air Quality Communications and align with other relevant topics'. As air quality crosses over with so many other areas (for example, climate change, public health, transport) it was felt that an overarching communications plan was not the best use of resources.
Public Information	Host regular events to raise awareness and education around air quality	Following the AQAP Steering Group Workshop, this action was amended to 'Host / attend events to raise awareness and education around air quality' as this is a more realistic approach based on the resource within the Climate Strategy and Environmental Protection teams.
Policy Guidance and Development Control	Sensor study	Following the AQAP Steering Group Workshop, this action was amended to 'Investigate potential for a sensor study' as there are not currently any actions / locations that stand out as being suitable for a sensor study. This could be explored again in the future, for example, to measure the impact of specific actions or projects on air quality.

Appendix C: Scenario Modelling Results

Table C-1: Pollutant emissions for NO_x, PM_{2.5}, PM₁₀, and CO₂ resulting from Scenario 1 – Upgrading Blackpool Council fleet.

Pollutant	Baseline (tonnes/yr)	Anticipated Scenario: Upgrade all vehicles registered before 2014 (14.1% of the council fleet)		Anticipated Scenario: Upgrade all vehicles registered before 2014 (14.1% of the council fleet)		Ambitious Scenario: Upgrade all vehicles registered before 2017 (39.1% of the council fleet)		Ambitious Scenario: Upgrade all vehicles registered before 2017 (39.1% of the council fleet)	
		Euro 6d / Euro 6		EV / Euro 6		Euro 6d / Euro 6		EV / Euro 6	
		tonnes/yr	% change	tonnes/yr	% change	tonnes/yr	% change	tonnes/yr	% change
NO _x	430.1	282.5	-34.3%	274.3	-36.2%	131.4	-69.5%	103.8	-75.9%
PM _{2.5}	15.9	13.7	-13.9%	13.6	-14.3%	12.8	-19.4%	12.6	-20.8%
PM ₁₀	26.6	24.4	-8.3%	24.3	-8.5%	23.5	-11.6%	23.3	-12.4%
CO ₂	126190.3	125432.6	-0.6%	117755.1	-6.7%	125388.2	-0.6%	97590.0	-22.7%

Table C-2: Scenario 2 and Scenario 3 testing results for NO₂ concentrations across monitoring sites in Blackpool Council.

Site ID	Measured 2022 (µg/m ³)	Modelled baseline 2022 (µg/m ³)	Scenario 2a: 50% bus electrification		Scenario 2b: 75% bus electrification		Scenario 3a: 5% car reduction		Scenario 3b: 10% car reduction		Scenario 3c: 15% car reduction	
			µg/m ³	% change	µg/m ³	% change	µg/m ³	% change	µg/m ³	% change	µg/m ³	% change
DF1	17.60	14.07	13.36	-5.05%	13.00	-7.60%	13.94	-0.92%	13.80	-1.92%	13.67	-2.84%
DF2	19.18	13.99	13.06	-6.65%	12.58	-10.08%	13.88	-0.79%	13.76	-1.64%	13.65	-2.43%
DF6	20.26	23.33	22.64	-2.96%	22.29	-4.46%	22.93	-1.71%	22.52	-3.47%	22.12	-5.19%
DF7	16.64	14.57	14.32	-1.72%	14.19	-2.61%	14.38	-1.30%	14.19	-2.61%	14.00	-3.91%
DF8	14.85	16.87	16.55	-1.90%	16.40	-2.79%	16.62	-1.48%	16.36	-3.02%	16.11	-4.51%
DF9	16.94	19.94	19.30	-3.21%	18.98	-4.81%	19.62	-1.60%	19.31	-3.16%	18.99	-4.76%
DF10	16.15	18.82	17.97	-4.52%	17.55	-6.75%	18.55	-1.43%	18.28	-2.87%	18.01	-4.30%
DF12	16.13	16.70	16.07	-3.77%	15.74	-5.75%	16.48	-1.32%	16.26	-2.63%	16.04	-3.95%
DF14	21.72	16.52	15.98	-3.27%	15.71	-4.90%	16.30	-1.33%	16.07	-2.72%	15.84	-4.12%
DF15	19.69	14.23	13.84	-2.74%	13.64	-4.15%	14.07	-1.12%	13.90	-2.32%	13.73	-3.51%
DF16	17.51	20.27	19.91	-1.78%	19.73	-2.66%	19.91	-1.78%	19.55	-3.55%	19.19	-5.33%
DF18	18.35	13.37	12.93	-3.29%	12.72	-4.86%	13.23	-1.05%	13.09	-2.09%	12.95	-3.14%

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less

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