



Stockton-on-Tees Borough Council Air Quality Strategy

2025-2030

Contents

Foreword	4
Stockton-on-Tees Borough Council's Air Quality Strategy - executive summary	5
1. Policy, legislation and guidance	6
2. How this strategy links with other key strategies and policies	9
3. Introduction	10
What is air pollution?	10
Outdoor air pollution	10
Indoor air pollution	10
Health impacts associated with air pollution	10
Pollutants within the atmosphere	11
4. Monitoring air quality within Stockton-on-Tees	13
5. Existing air quality data	14
National trends	14
Nitrogen Dioxide	14
Particulate Matter (PM ₁₀ & PM _{2.5})	15
Stockton-on-Tees existing air quality data	16
6. Our current position in numbers	19
7. How air quality impacts health within Stockton-on-Tees	20
8. Air quality and Stockton-on-Tees Borough Council's existing Environmental Sustainability and Carbon Reduction Strategy	21
9. The Council's approach to this Strategy	22
What will this strategy achieve?	22

Leading by example	22
A Strategy suitable for the existing air pollution levels within Stockton-on-Tees	23
Action plan and responsibility	23
Working in collaboration	23
Strategy risks and review	23
10. Our Vision, Mission and Priorities for improving air quality	24
11. Our priorities to improve air quality	25
Monitoring, reporting and increasing awareness of air quality	28
Strategic measures	29
Reduce emissions from vehicles	30
Reduce emissions from domestic, industrial and agricultural sources	31
New developments, construction, and planning	32
12. Action plan to achieve priorities	33
13. Contact us	49
References	50

Foreword

Today poor air quality is one of the greatest risks to public health in all urban areas. Within Stockton-on-Tees we are in the very fortunate position whereby our existing levels of air quality are within National Objectives and as such we do not need to declare Air Quality Management Areas.

Despite our relatively good levels of air quality as an Authority we refuse to rest, and we are working diligently to improve our air quality levels further to protect the health of our residents, businesses and visitors alike. We are undertaking this work through reviewing our operations, working collaboratively with partners and taking enforcement action against those who commit air quality offences.

The 2025-2030 Air Quality Strategy is an excellent opportunity to raise awareness of air quality and put measures in place to drive change within our Borough. The new and exciting Council strategy will be fundamental in ensuring that we continue to improve the air we breathe in Stockton-on-Tees and that we deliver a lasting improvement for generations to come.

Councillor Norma Stephenson OBE

Cabinet Member Access, Communities & Community Safety.



N. Stephenson

Stockton-on-Tees Borough Council's Air Quality Strategy - executive summary

This is Stockton-on-Tees Borough Council's first Air Quality Strategy. The Strategy identifies a series of robust measures and commitments which the Local Authority are to implement to ensure we maintain and improve our existing good levels of air quality throughout the Borough.

Stockton-on-Tees maintains good air quality levels across the Borough, with no monitoring locations in breach of the National Air Quality Objectives or Target Levels established by national governing legislation.

The Authority continues to fulfil its legal duties under *The Environment Act 1995*, as amended by *The Environment Act 2021* to monitor for air pollution using both automatic continuous monitoring at fixed locations and diffusion tube monitoring at locations of interest dictated by traffic flow, local issues or resident concerns.

Stockton-on-Tees has good air quality levels. As an Authority we are determined to continually improve the levels of air quality to protect public health and to have a clean environment for everyone to live and work within.

The Strategy takes a holistic approach across the Local Authority and has been produced in conjunction with many departments who are able to contribute to improving our air quality across the Borough. This Strategy takes

significant strides to ensuring air quality is embedded at the heart of the Local Authority and it is a conscious part of the daily functions of the Authority.

The Strategy builds upon existing good practice already undertaken by the Authority and identifies new opportunities for further improvements which are to be focused upon for the lifetime of the Strategy which will be valid from 2025 until 2030. Progress on the actions and measures listed within the Strategy will be reported upon yearly within our Annual Status Report submission to the Department for Environment, Food & Rural Affairs (DEFRA) which can be requested via our website.

Our priorities for this Strategy are to focus upon:

- 1. Monitoring, reporting and increasing awareness of air quality** to enable us to expand our air quality network whilst ensuring residents and businesses have

access to information about air quality which can lead to behavioural changes.

- 2. Strategic measures** will be implemented within Stockton-on-Tees Borough Council to ensure we are able to improve air quality levels throughout the Borough, leading by example.
- 3. Reduce emissions from vehicles** is a key priority as the main source of air pollution within Stockton-on-Tees is from vehicles travelling throughout the Borough.
- 4. Reduce emissions from domestic, industrial and agricultural sources** as these sources are known to significantly contribute to air pollution levels with domestic wood burning being the UK's largest source of particulate matter air pollution.
- 5. New developments, construction and planning** will be prioritised to ensure the design, construction, demolition of new developments can improve our levels of air pollution.

1. Policy, legislation and guidance

Air Quality and the protection of public health from air pollution is regulated through various European Directives and domestic legislation. In 1999 the Gothenburg Protocol established ceiling levels to control long-range transboundary pollutants; this was subsequently enacted into UK law via the *National Emission Ceiling Regulations 2018*¹ whilst the *European Directive 2008/50/C*² sets 'limit values' for ambient air quality which must not be exceeded.

Within UK legislation air quality emissions and levels are tightly controlled via a number of key pieces of legislation:

- ***Environmental protection Act (1990)***³ which enables Local Authorities to investigate and abate Statutory Nuisances in relation to Section 79(B) "*smoke emitted from premises so as to be prejudicial to health or a nuisance*"
- ***Clean Air Act (1993)***⁴ which prohibits dark smoke emitting from the chimneys of any building or industrial trade premises. The legislation also allows Local Authorities powers to designate Smoke Control Areas where smoke can not emit from a chimney unless an authorised fuel or 'exempt appliance' is used. Further information on Smoke Control Areas can be found at [Smoke control areas: the rules - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/topics/smoke-control-areas)
- ***The Environment Act (1995)***⁵ which sets out Local Air Quality Management (LAQM) process including the requirement for Local Authorities to regularly review and assess air quality within their areas.
- ***The Air Quality Standards Regulations (2010)***⁶ Schedule two sets the limit values which pollutants should not exceed, the National Air Quality Objective limit values are displayed in table 1.

¹ [The National Emission Ceilings Regulations 2018](#)

² [Directive 2008/50/EC of the European Parliament and of the Council](#)

³ [Environmental Protection Act 1990](#)

⁴ [Clean Air Act 1993](#)

⁵ [The Environment Act 1995](#)

⁶ [The Air Quality Standards Regulations 2010](#)

- ***The Environmental Permitting (England and Wales) Regulations (2016)***⁷ enacts requirements laid out within the ***Industrial Emissions Directive (2010)***⁸ which regulates emissions from industrial installations and mobile plant using Best Available Techniques (BAT).
- ***Air Quality (Domestic Solid Fuels Standards (England) Regulations (2020)***⁹ places restrictions on wet wood sales for domestic burning. It also places limits on sulphur and smoke emissions from manufactured solid fuels whilst it also phases out the sale of bituminous coal.
- ***The Environment Act (2021)***¹⁰ sets long-term targets for air pollution as well as a specific targets to be set in relation to PM_{2.5}; these targets are enacted within secondary legislation via ***The Environmental Targets (Fine Particulate Matter) (England) Regulations (2023)***¹¹. The targets are:
 - an annual mean concentration target of 10 micrograms per cubic metre (µg/m³) to be met across England by 2040 for PM_{2.5}.
 - a population exposure reduction target of 35% in population exposure by 2040 (compared to a base year of 2018).

Interim targets are to be achieved by the end of January 2028 which require:

- the highest annual mean concentration in the most recent full calendar year must not exceed 12 µg/m³ of PM_{2.5}.
- compared to 2018, the reduction in population exposure to PM_{2.5} in the most recent full calendar year must be 22% or greater.

The Environment Act (2021) also amended the *Clean Air Act (1993)*, so that from 1 May 2022:

- local authorities can issue a financial penalty for smoke emitting from a chimney in a smoke control area.
- it is an offence to sell controlled solid fuel without taking reasonable steps to notify customers it is an offence to purchase the fuel for use within a Smoke Control Area.
- financial limit on penalties has been removed for the sale of controlled fuels for delivery to a building within a Smoke Control Order.
- local authorities can extend their Smoke Control Areas to include moored vessels.

The Environment Act (2021) also amended the *Environmental Protection Act (1990)* so that:

⁷ [The Environmental Permitting \(England and Wales\) Regulations 2016](#)

⁸ [Industrial Emissions Directive 2010](#)

⁹ [Air Quality \(Domestic Solid Fuels Standards \(England\) Regulations 2020](#)

¹⁰ [The Environment Act 2021](#)

¹¹ [The Environmental Targets \(Fine Particulate Matter\) \(England\) Regulations 2023](#)

- Statutory Nuisance action can be taken for smoke emitted from a private dwelling in a smoke control area in England which is “*prejudicial to health or a nuisance*”.

UK Government published an Air Quality Strategy in 2019¹², along with an Environmental Improvement Plan in 2023¹³ whilst in 2023 the Air Quality Strategy: Framework for Local Authority Delivery¹⁴ was also published.

Guidelines for outdoor and indoor air pollution levels

The World Health Organisation (WHO) published updated guidelines¹⁵ for air quality levels in September 2021 with thresholds and limits for key pollutants that pose a risk to health. Those pollutants included Particulate Matter PM_{2.5}, PM₁₀, Ozone, Nitrogen Dioxide, Sulphur Dioxide and Carbon Monoxide.

In relation to indoor air pollution the WHO published guidelines for selected pollutants in 2010¹⁶ and in 2020 the National Institute for Health and Care Excellence produced guidance¹⁷ in relation to indoor air quality at home.

¹² [Clean Air Strategy 2019 - GOV.UK](#)

¹³ [Environmental Improvement Plan 2023 - GOV.UK](#)

¹⁴ [Air quality strategy: framework for local authority delivery](#)

¹⁵ [WHO global air quality guidelines: particulate matter \(PM2.5 and PM10\), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide](#)

¹⁶ [WHO guidelines for indoor air quality: selected pollutants](#)

¹⁷ [Overview | Indoor air quality at home | Guidance | NICE](#)

2. How this strategy links with other key strategies and policies

Stockton-on-Tees Borough Council's Air Quality Strategy links with other key pieces of national, regional and local strategies and plans as illustrated below:



3. Introduction

What is air pollution?

Air pollution is the contamination of the air with a mixture of particles and gases which emit from both natural and man-made sources which can occur in two forms, these are:

Outdoor air pollution

Within Stockton-on-Tees the main sources of outdoor air pollution are from road transport vehicles, industrial and manufacturing processes, heating sources, the construction sector and agriculture activities.

Indoor air pollution

Indoor air pollution also occurs inside vehicles and buildings such as houses, workplaces and schools through dust, dirt, mould and gases¹⁸ which can be caused by cooking, heating systems, fires, solid fuel stoves, cleaning products, building products and tobacco smoke¹⁹.

Health impacts associated with air pollution

The effect of both short-term and long-term exposure to these pollutants which are often odourless and not visible can have a significant impact on the health and life expectancy of the population. Air pollution has been identified as the largest environmental risk to public health in the UK²⁰ and estimates suggest that long-term exposure to air pollution accounts for an annual effect equivalent of 28,000 to 36,000 deaths per year in the UK²¹. Whilst air pollution affects everybody there are greater risks of ill-health associated with those who have pre-existing medical conditions affecting the heart and/or lungs, vulnerable members of society such as children, pregnant women and the elderly²² whilst research also suggests there are strong links between greater levels of exposure to air pollution for those living in less affluent areas²³.

¹⁸ [Air pollution at home](#)

¹⁹ [Indoor Air Quality: Air Quality Expert Group \(DEFRA\)](#)

²⁰ [Health matters: air pollution](#)

²¹ [Health matters: air pollution - GOV.UK](#)

²² [Chief Medical Officer's Annual Report 2022](#)

²³ [Air Quality and Social Deprivation in the UK](#)

Pollutants within the atmosphere

Within the atmosphere there are many pollutants which are contaminating the air we breathe which are produced from various forms of indoor and outdoor sources. These pollutants consist of

- Nitrogen Dioxide (NO₂)
- Particulate Matter (PM)
- Sulphur Dioxide (SO₂)
- Ammonia (NH₃)
- Non-Methane Volatile Organic Compounds (NMVOCs)
- Ozone (O₃)

Whilst we aim to achieve reductions in all pollutants within the atmosphere; both Nitrogen Dioxide and Particulate Matter are pollutants of concern at a national and local level which we are prioritising.

Particulate Matter (PM)

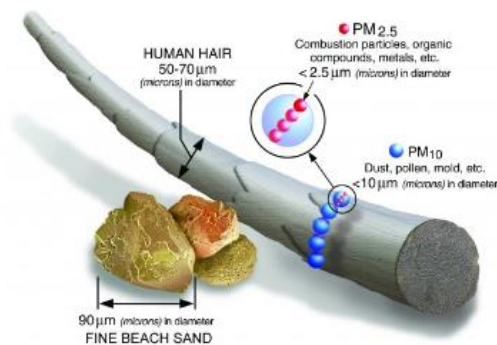


Figure 1: Size of PM₁₀ and PM_{2.5} particles

Particulate Matter (PM) are fine solid and liquid particles within the atmosphere. The particle size is measured by its diameter and are signified by a numerical value which represents the particle diameter in microns, it is often referred to as:

- coarse particles (PM₁₀) where particles are less than 10 microns in diameter²⁴
- fine particles (PM_{2.5}) where particles are less than 2.5 microns in diameter
- ultra fine particles (PM_{0.1}) where particles are less than 0.1 micron in diameter.

To put these values into context a PM₁₀ particle is typically smaller than the width of a single strand of human hair and a PM_{2.5} particle is a quarter of that width. The danger of such small particles is that due to their size they can enter the lungs and the smaller particles such as PM_{2.5} can pass through the lungs and enter the blood stream where they are transported around the body and can become lodged in the heart, brain and other organs²⁵.

²⁴ [Particulate Matter \(PM\) Basics](#)

²⁵ [Air quality: explaining air pollution GOV.UK](#)

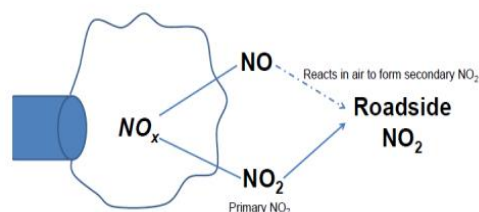
PM₁₀ and PM_{2.5} are typically associated with domestic wood burners and wear and tear from transport vehicles tyres and break disks, whilst PM₁₀ is also associated with dust.

Particulate Matter is a carcinogen which is a substance capable of causing cancer, notably in this case lung cancer. It is also associated with other health impacts such as causing asthma, chronic obstructive pulmonary disease (COPD), coronary heart disease, diabetes and there are emerging evidence links between air pollution and dementia.

Data suggests that Particulate Matter is attributable to 5.5% of adult deaths in Stockton-on-Tees which is slightly above the North East Region (5.4%) but below England (5.8%)²⁶. It is estimated that a 1 µg/m³ reduction in fine particulate matter could prevent approximately 50,900 cases of coronary heart disease, 16,500 strokes, 9,300 cases of asthma and 4,200 lung cancers over an 18-year period²⁷.

Nitrogen Oxide (NO_x) and Nitrogen Dioxide (NO₂)

Nitrogen Oxide (NO_x) is produced when combustion occurs with fossil fuels such as power generation, industrial processes, domestic heating and vehicles. The Nitrogen Oxide then releases into the atmosphere and reacts with other chemicals such as primary Nitrogen Dioxide (NO₂) and Nitric Oxide (NO) to produce secondary, roadside Nitrogen Dioxide (NO₂)²⁸.



Nitrogen Dioxide primarily affects the lungs leading to inflammation (swelling) of the airways, worsened cough and wheezing, reduced lung function, worsening asthma, and increased susceptibility to respiratory infections. Short term exposure at high concentrations of Nitrogen Dioxide can also have health effects on the population such as producing coughs, excess mucus and shortness of breath²⁹. Fortunately, since the 1970s there has been an estimated 77% reduction in NO_x emissions from all sectors with approximately 83% reduction in vehicle NO_x emissions due to the introduction of catalytic convertors and tighter vehicle regulations such as Euro Standards³⁰.

Figure 2: The relationship between NO_x and NO₂

²⁶ [Fingertips | Department of Health and Social Care](#)

²⁷ [Health matters: air pollution](#)

²⁸ [Draft Revised AQ Plan.pdf](#)

²⁹ [Health matters: air pollution - GOV.UK](#)

³⁰ [Nitrogen Oxides | National Atmospheric Emissions Inventory](#)

4. Monitoring air quality within Stockton-on-Tees

Air Quality levels within Stockton-on-Tees have been monitored since 1998 and since that time there has been no need to declare an Air Quality Management Area for any pollutant at any location throughout the Borough.

Monitoring is currently undertaken by real time continuous monitoring stations at Stockton A1305 and Eaglescliffe Secondary School as well as passive diffusion tubes fixed to lampposts throughout the Borough.

Continuous Monitoring Sites

The Stockton A1305 continuous monitoring site is dedicated to measuring levels of Nitrogen Dioxide (NO₂) and Particulate Matter (PM_{2.5}). The monitoring site at Eaglescliffe Secondary School monitors for Nitrogen Dioxide, Particulate Matter (both PM₁₀ and PM_{2.5}), and Benzene. Until 2024, a third continuous monitoring site was operational at Cowpen Depot, Billingham; however, its closure was mandated by a decision beyond the control of the Local Authority. Stockton-on-Tees Borough Council does not conduct monitoring for ultrafine particulate matter at any location.

These continuous monitoring sites are integral components of the Automatic Urban and Rural Network (AURN), a nationwide monitoring network in the UK. The sites undergo calibration every two weeks, and the data collected by these continuous monitors is available online on an hourly basis. This data is validated by an independent body and is incorporated into the Authority's Annual Status Report submitted to the Department for Environment, Food & Rural Affairs (DEFRA). The collected data facilitates assessments of hourly, 24-hourly, and annual mean values.

Passive Monitoring Techniques

In addition to continuous monitoring, passive diffusion tubes are used to measure Nitrogen Dioxide levels at 13 strategically chosen locations throughout the Borough, particularly in areas of concern or with high traffic volumes. These tubes are collected and sent to an independent laboratory for analysis, with data being made available on a monthly basis. This data is used to derive annual averages and is also included in the Authority's Annual Status Report.

5. Existing air quality data

National trends

Nitrogen Dioxide

Levels of Nitrogen Dioxide have declined on a national basis for a considerable amount of time, and this can be attributed to technological advances in the transport and energy sectors. At Urban Background sites the annual mean NO₂ concentration in 2023 was 14.2 µg/m³ which is the lowest recorded. Likewise for Roadside sites the national average is 21.8 µg/m³ which is again the lowest level recorded. Whilst Covid-19 resulted in significant improvements in air quality levels throughout 2020 due to travel restrictions, on a national level, NO₂ increased in 2021, followed by year-on-year reductions until 2023 where levels then fell to their lowest recorded level³¹.

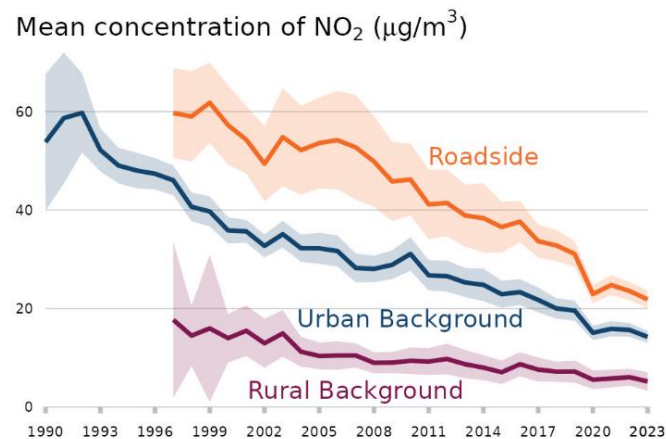


Figure 3: National average Nitrogen Dioxide trends

³¹ [Nitrogen dioxide \(NO₂\) - GOV.UK](https://www.gov.uk/government/statistics/nitrogen-dioxide-no2)

Particulate Matter (PM₁₀ & PM_{2.5})

Levels of both PM₁₀ and PM_{2.5} have also seen significant reductions throughout the years to the present day whereby levels are continuing to follow downward trends.

The national average long-term Roadside PM₁₀ levels have declined from 36.7 µg/m³ in 1997 to 17.2 µg/m³ in 2015 where they stabilised for a number of years before reducing further in 2020. They increased slightly in 2022 before reducing to the lowest recorded levels in 2023 which was 15.2 µg/m³. The reduction in PM₁₀ is again attributed to reductions in PM₁₀ emissions particularly from road transport sources³².

National average PM_{2.5} levels follow a similar pattern to PM₁₀ levels whereby Roadside sites have reduced from 12.8 µg/m³ in 2009 to 7.7 µg/m³ in 2023 which is again the lowest levels recorded. These reductions are attributed to decreased emissions from road transport sources³³.

Figure 4: National PM_{2.5} trends

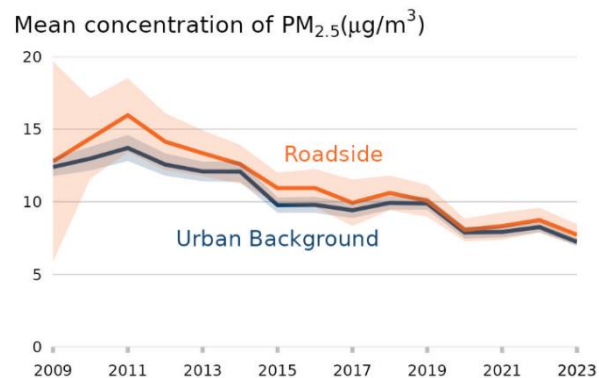
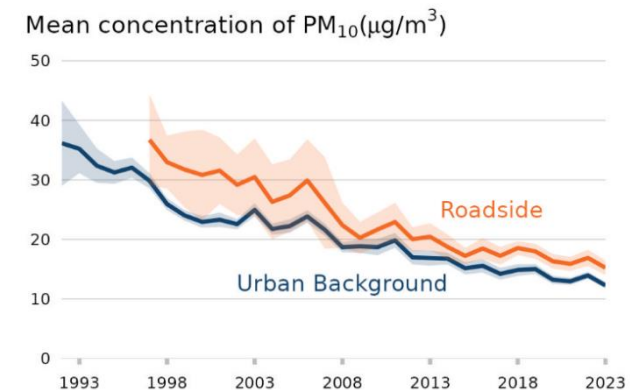


Figure 5: National PM₁₀ trends



³² [Particulate matter \(PM10/PM2.5\) - GOV.UK](#)

³³ [Particulate matter \(PM10/PM2.5\) - GOV.UK](#)

Stockton-on-Tees existing air quality data

Data collected within Stockton-on-Tees indicates a general downward trend in air pollution levels. Over the past five years, with the exception of PM₁₀ at Eaglescliffe, all monitored pollutants across various sites have shown lower values in 2023 compared to 2019. The Authority's 2024 Annual Status Report to DEFRA highlights that PM_{2.5} levels at Stockton A1305 and Eaglescliffe were the lowest ever recorded at these sites.

Additionally, PM₁₀ levels at Eaglescliffe improved compared to the previous year, and 10 out of 13 diffusion tubes demonstrated a reduction in Nitrogen Dioxide concentrations.

The full data set for Nitrogen Dioxide, PM₁₀, PM_{2.5}, and Benzene collected within Stockton-on-Tees over the past five years is presented in Table 2.

The highest pollution values are typically recorded at sites in close proximity to the A66 dual carriageway, which transects the Borough. These values are closely monitored, but it is important to note that pollution concentrations decrease significantly with distance. Consequently, concentrations at nearby sensitive receptors remain comfortably within legal limits.

The air quality data obtained throughout Stockton-on-Tees complies with all legal requirements and National Air Quality Objectives as outlined in Table 1. As a result, the Authority currently has no need to declare an Air Quality Management Area. The data presented below suggests that, should current trends continue, the Authority is unlikely to need to declare an Air Quality Management Area in the future.

Table 1: National air quality objectives and targets

Pollutant	Air Quality Objective/ Target	Concentration	Measured as:
Nitrogen Dioxide (NO₂)	Air Quality Objective	200 µg/m ³ not to be exceeded more than 18 times per year.	1-hour mean
Nitrogen Dioxide (NO₂)	Air Quality Objective	40 µg/m ³	Annual Mean
PM₁₀	Air Quality Objective	50 µg/m ³ not to be exceeded more than 35 times per year	24-Hour Mean
PM₁₀	Air Quality Objective	40 µg/m ³	Annual Mean
Sulphur Dioxide (SO₂)	Air Quality Objective	350 µg/m ³ not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO₂)	Air Quality Objective	125 µg/m ³ not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO₂)	Air Quality Objective	266 µg/m ³ not to be exceeded more than 35 times a year	15-minute mean
PM_{2.5}	2028 Interim Target	12 µg/m ³	Annual Mean
PM_{2.5}	2040 Legally Binding Target	10 µg/m ³	Annual Mean
Benzene	Air Quality Objective	5 µg/m ³	Annual Mean

Table 2: Stockton-on-Tees Borough Council Air Quality Data 2019- 2023



Year	2019	2020	2021	2022	2023
NO₂ (National Air Quality Objective Level-Annual Average µg/m³)	40 µg/m³				
Eaglescliffe AURN	12.5	9.4	10.7	9.8	10.2
Stockton-on-Tees A1305 AURN	17.8	12.1	14.7	13.4	15.1
Billingham AURN	16.5	13	13	12.9	12.4
Junction Road, Norton (Diffusion Tube)	N/A	14.8	17.6	15	14.8
AQM Eaglescliffe (Diffusion Tube)	12.4	10.2	10.9	9.9	10.1
Thornaby Road, Thornaby (Diffusion Tube)	22.1	18	20.1	18.8	16.8
High Street, Yarm (Diffusion Tube)	19.7	16.1	18	17.6	16.2
Green Lane, Yarm (Diffusion Tube)	N/A	8.8	8.8	8.7	8.3
High Street, Norton (Diffusion Tube)	20.6	15.1	18	16.4	15.9
Marsh House Avenue, Billingham (Diffusion Tube)	19	12.1	16.5	13.4	14.2
A66 Sun Gardens (Diffusion Tube)	34.9	25.8	35.1	28.5	26.4
A66 Yarm Road (Diffusion Tube)	40.4*	31.6	36.2	34.2	33.8
A66 Middlesbrough Road (Diffusion Tube)	34	27.5	29.6	30	27.4
St Johns Crossing, Stockton (Diffusion Tube)	28.9	22.6	25.3	22.6	23.6
Portrack Lane, Stockton (Diffusion Tube)	27	22.4	23.5	22.9	21.5
High Street, Yarm (2) (Diffusion Tube)	N/A	N/A	N/A	16.1	15.1

Table 3 continued: Stockton-on-Tees Borough Council Air Quality Data 2019- 2023

NO₂ (National Air Quality Objective Level- Annual number of 1-hour means exceeding 200µg/m³)	18				
Eaglescliffe AURN	0	0	0	0	0
Stockton-on-Tees A1305 AURN	0	0	0	0	0
Billingham AURN	0	0	0	0	0
PM₁₀ (National Air Quality Objective Level- Annual Average µg/m³)	40 µg/m³				
Eaglescliffe AURN	13.8	14	13.5	14.4	14
PM₁₀ (National Air Quality Objective Level- (Annual number of 24-hour means exceeding 50 µg/m³)	35				
Eaglescliffe	3	1	0	3	0
PM_{2.5} (2028 Interim Target Level µg/m³)	12 µg/m³				
PM_{2.5} (2040 Legally Binding Target Level µg/m³)	10 µg/m³				
Eaglescliffe AURN	8.4	8.2	8.3	8.6	7.8
Stockton-on-Tees A1305 AURN	8.5	8.4	7.9	8.7	7.1
Benzene (Target Level µg/m³)	5 µg/m³				
Eaglescliffe AURN	0.61	0.439	0.430	0.42	0.61

* In 2019 the A66 Yarm Road diffusion tube exceeded 40 µg/m³ from its position on the highway. Once distance correction was applied to the nearest sensitive receptors the value fall to 22.7 µg/m³ and subsequently did not exceed the National Air Quality Objective level.

6. Our current position in numbers

2 continuous monitoring locations	14 air quality assemblies delivered to over 2,400 Key Stage 2 children since the start of 2024	181,938 'contacts' for Clean Air Day since 2023*	Approximately 89.3% of Stockton-on-Tees Borough Councils vehicle fleet are Euro 6*	22 public charging points installed within Stockton-on-Tees Borough Councils district since the start of 2023*	6 electric vehicles 2 hybrid vehicles 1 electric Bus 9 alternative fuel vehicles on our fleet*
13 diffusion tube locations for Nitrogen Dioxide*					4 climate coalitions operating*
75.18% reduction in carbon emissions since 2010*					Lowest levels of PM _{2.5} recorded in 2023 at both monitoring locations.*
0 AQMA's declared since air quality monitoring began in the Borough					5.5% fraction of mortality attributed to particulate air pollution in Stockton-on-Tees. England value is 5.8% North East value is 5.4%*
1 electric bin wagon 2 electric community transport vehicles*					17 anti-idling patrols at primary schools, engaging with over 140 drivers.
Reductions in NO ₂ at 10 out of 13 diffusion tube locations in 2023 compared to 2022*	Over 96% data capture rate for NO ₂ at all continuous monitoring locations for 2023*	0 exceedances of National Air Quality Objectives or Air Quality Targets*	Up to 2024 Approximately 30,000 trees have been planted*	49 Environment Agency & 65 Stockton-on-Tees Borough Council regulated industrial processes operate within Stockton-on-Tees*	13 schools signed up to 'Let's Go Zero'

*Data correct up to 2024 Annual Status Report

7. How air quality impacts health within Stockton-on-Tees

The fraction of mortality attributed to particulate air pollution within Stockton-on-Tees is 5.5%; this is currently lower than the overall value for England which is 5.8% but higher than 5.4% representing the North East region. The data trend for Stockton-on-Tees demonstrates an overall improvement from 2018 data (from 5.7% to 5.5%), however since the easing of Covid-19 lockdown restrictions in 2020 the data has shown an increase from 2020 to 2022³⁴. As well as impacting mortality, air pollution is a risk factor for multiple health conditions, and whilst there are other risk factors to consider for these conditions, reducing air pollution would reduce the risks for people developing the associated health conditions, and improve the quality of life for people in Stockton-on-Tees. These conditions are evidenced by data from the Public Health Outcomes Framework including:

- **Lung cancer** registrations in Stockton-on-Tees between 2017 and 2019 were 97.4 per 100,000 people, which is above the England rate (77.1 per 100,00) although below the North East region rate (104.7 per 100,00)³⁵.
- **COPD prevalence** which in 2023/24 affected 2.7% of Stockton-on-Tees' population. This is slightly less than the North East region of 2.8% but more than those affected in England (1.9%)³⁶.
- **COPD hospitalisations**. The COPD prevalence resulted in 557 per 100,000 population emergency hospital admissions for COPD in those aged 35 and above. This is higher than those in the North East region (526 per 100,000) as well as England (326 per 100,00)³⁷ highlighting the burden of COPD within Stockton-on-Tees.
- **Coronary heart disease** with Stockton-on-Tees experiencing 462.2 admissions per 100,000 population in 2022/23. This is significantly above those in England (387.1 per 100,000) and one of the highest in the North East. Prevalence data for 2023/24 also shows that prevalence is 3.6% of Stockton-on-Tees's population which is lower than the North East region of 3.8% but higher than the prevalence of England which is 3.0%³⁸.
- **Asthma** rates for 2023/24 for those aged 6 and above are high within Stockton-on-Tees. In 2023/24 the prevalence of asthma in Stockton-on-Tees was 7.6% which is higher than both the North East (7.4%) and England (6.5%)³⁹.

³⁴ [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

³⁵ [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

³⁶ [Respiratory disease | Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

³⁷ [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

³⁸ [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

³⁹ [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

8. Air quality and Stockton-on-Tees Borough Council's existing Environmental Sustainability and Carbon Reduction Strategy

Stockton-on-Tees Borough Council launched a 10-year Environmental Sustainability and Carbon Reduction Strategy⁴⁰ in 2022 to ensure the Authority achieves Net Zero by 2032. One of the key aspects required to achieve the Net Zero target is to reduce the air pollution emissions produced by the Authority and it is therefore recognised that the measures set out in this Strategy will play a significant role in the Authority working towards its 2032 targets.

Up to 2023/24 there has been a 75.18% reduction in carbon emissions from 2010; with a reduction of 437 tonnes of carbon in 2023/24 alone compared to the previous year. Due to the ongoing work across the Authority to reduce emissions the Authority finds itself in a promising position of meeting the 2032 target as demonstrated in Figure 6. Despite this however the Authority acknowledges that a further 881.5 tonnes of carbon need to be removed from the authority's emissions on a yearly basis.

This strategy identifies several opportunities which will assist in meeting the 2032 target through the reduction of emissions from fleet vehicles, operational service delivery and building assets.

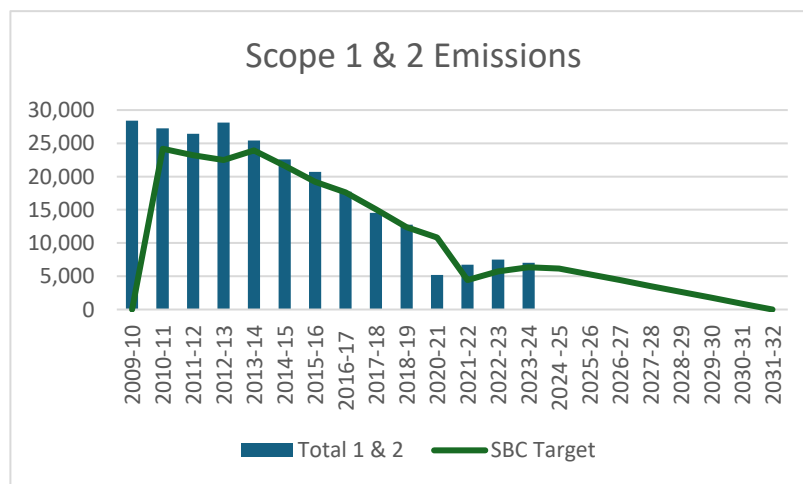


Figure 6: Stockton-on-Tees Borough Council emission data and net-zero target

⁴⁰ [Environmental Sustainability and Carbon Reduction Strategy 2022 - 2032](#)

9. The Council's approach to this Strategy

Stockton-on-Tees Borough Council's Council Plan 2024⁴¹ sets out five inter-connected priorities that will ensure we work together to overcome our Borough's challenges and achieve our shared vision for our communities:

- *Priority one – The best start in life to achieve big ambitions*
- *Priority two – Healthy and resilient communities*
- *Priority three – A great place to live, work and visit*
- *Priority four – An inclusive economy*
- *Priority five – A sustainable Council*

Improving air quality throughout the Borough will play a significant role in helping the Authority to achieve the aims of the Council Plan as reducing air quality will make the Borough's air safer thus protecting people from harm whilst also ensuring the Borough is a cleaner and more attractive place to live and work.

What will this strategy achieve?

The air pollution which we breathe is typically produced on a local geographical basis; whilst some air pollution can travel many miles and at times overseas, we are usually impacted by the emissions produced within our own Borough. We have therefore produced this strategy to tackle air pollution sources on a local level which if we improve will also have positive implications at a national level. We therefore aim to improve air quality levels throughout the Borough by achieving the following key objectives set out by this strategy.

Leading by example

Stockton-on-Tees Borough Council intends to use this Strategy, and the measures listed within it to lead by example in reducing emissions, supporting sustainable practices and reducing our carbon footprint. Whilst the Council is in a strong position to reduce emissions throughout the Borough, a key objective is to raise awareness and promote behavioural changes which in turn will facilitate residents and businesses throughout the Borough to play their part in reducing their emissions which collectively will improve the air quality levels within our Borough.

⁴¹ [Council Plan 2024](#)

A Strategy suitable for the existing air pollution levels within Stockton-on-Tees

The measures selected for inclusion within this strategy are a proportionate response to the existing levels of air pollution experienced within Stockton-on-Tees. Although a series of further measures could be implemented which would have a positive impact on our air quality levels such as introducing clean air zones or commissioning traffic ANPR studies, it is felt that such approaches are currently unjustified at this time and would not provide value for money.

Action plan and responsibility

The Air Quality Strategy has been created following extensive rounds of internal consultation as well as consultation with key partners and members of the public. The Strategy sets out extensive measures to be achieved which is accompanied by an action plan of steps which will be implemented to achieve the measures, the department responsible for each measure and a timescale for implementation over the next five years. The action plan will be subject to on-going monitoring, and it will be the responsibility of our pre-established Air Quality Working Group who meet regularly with key stakeholders across the Authority to ensure measures are implemented in accordance with the Action Plan.

Whilst some measures are already in place there are a wide range of newly identified measures which are to be implemented from the launch of this Strategy. Measures which will have the greatest impact on our air quality levels will be prioritised for early implementation and progress on the action plan and measures will be reported on a yearly basis within our Annual Status Report submission to DEFRA.

Working in collaboration

Our Air Quality Strategy will be delivered by collaborating internally across many departments and work streams as well as externally with local partners and businesses throughout the Borough. Through collaborative working we will achieve the greatest outcomes from this strategy which will ultimately lead to the greatest improvements in air quality and the protection of the health and wellbeing of those who live, work and visit the Borough.

Strategy risks and review

The Council is subject to changes posed by extreme environmental events, economic uncertainty, local and national political landscape as well as technological, social and legal changes. Each of these changes inevitably impacts upon the priorities and commitments of the Council which in turn could impact upon the delivery of some measures listed within this strategy. The risks posed to the strategy will be kept under constant review which will be the responsibility of the Air Quality Working group. The strategy will be reviewed at three and five years to account for changes in government policy and legislation as well as considering any new opportunities.

10. Our Vision, Mission and Priorities for improving air quality



11. Our priorities to improve air quality

The priorities for our Air Quality Strategy cover five key themes. Specific measures are listed within each respective priority and an action plan for how each measure will be achieved are detailed in the action plan section of the strategy.

Monitoring, reporting and increasing awareness of air quality	Strategic measures
<ul style="list-style-type: none"> Nitrogen Dioxide, PM2.5 & PM10 will be monitored throughout Stockton-on-Tees We will expand our air quality monitoring network Progress relating to Air Quality levels and actions within the Air Quality Strategy will be reported Annually Our Air Quality website and corporate social media channels will become platforms for sharing data and information We will discuss indoor and outdoor air quality with food businesses when required. We will raise awareness of the risks of poor indoor air quality with best practice advice to be shared We will work with schools to raise awareness and education around air quality and sustainability We will support national campaigns whilst also creating our own air quality campaigns/ awareness sessions We will work with allotment owners to raise awareness of air quality impacts associated with bonfires We will create a training course for residents and businesses in relation to Air Quality 	<ul style="list-style-type: none"> We will explore ways to reduce our carbon footprint whilst working towards Net Zero emission targets We will develop a corporate travel plan We will expand our Air Quality Working Group to ensure delivery of this Air Quality Strategy We will enhance staff knowledge in relation to indoor and environmental air quality We will apply for external funding for grants relevant to Air Quality We will consider air quality within Joint Strategic Needs Assessments We will take enforcement action and work to tackle fraud or mis-selling cases relating to green energy We will continue to implement and explore new digital technology We will produce a Green Fleet and Sustainable Procurement Strategy A total life cost will be required for vehicles being purchased or leased We will reduce emissions from events

Reduce emissions from vehicles	Reduce emissions from domestic, industrial and agricultural sources
<ul style="list-style-type: none"> • We will tackle emissions from idling vehicles • We will promote the use of car lease schemes offering zero and ultra-low emission vehicles internally • We will implement local Hackney Carriage and Private Hire Licensing Policy • We will explore ways to incentivise the Hackney Carriage and Private Hire trade to purchase electric and hybrid vehicles • We will work with bus operators to upgrade their fleet and reduce emissions • We will work with Tees Valley Combined Authority to develop an Electric Vehicle Strategy and implementation plan for the Tees Valley • We will reduce vehicle emissions from our Fleet • We will develop a local implementation plan as a sub-strategy to the Tees Valley Strategic Transport Plan • We will upgrade Urban Traffic Management Control Systems • We will promote active travel • We will invest, support and monitor the installation of new cycle route infrastructure 	<ul style="list-style-type: none"> • We will review Smoke Control Boundaries within the Borough • Allegations of non-compliance within Smoke Control Area will be investigated and enforcement action will be taken where appropriate • We will ensure retailers selling solid fuel for use within domestic properties display the 'Ready to Burn' logo on their products • We will engage with the farming industry to reduce agricultural emissions • We will work to minimise emissions from industrial processes which hold a Part B permit

New developments, construction and planning

- We will implement a new Local Plan with strong links to Air Quality and Environmental Sustainability
- We will utilise the planning system to ensure emissions associated with construction, demolition and operational phases of developments are minimised
- We will develop an Air Quality/ Low Emission Technical Advice Note to accompany the new Local Plan
- We will ensure chimney stacks for wood burners discharge at appropriate heights
- We will follow new national planning guidance to improve air quality

Monitoring, reporting and increasing awareness of air quality

Within Stockton-on-Tees Borough Council we have continuous monitoring sites and diffusion tubes which provided accurate robust data to demonstrate compliance with legal limits and the National Air Quality Objectives which have ensured an Air Quality Management Area has not been required previously.

Despite the good monitoring and good data collection we want to expand our air quality network to ensure we are assessing air quality in as many viable locations as possible throughout the Borough. Doing this will ultimately allow us to have a greater picture on air quality levels throughout the Borough, enabling a greater protection of public health and ensuring greater accuracy amongst air quality assessments by developers when they consider developing within our Borough.

We also believe it is vitally important to increase the awareness of air quality for residents and businesses to encourage behavioural change. We are therefore going to run national and local campaigns and promote air quality information on our website to raise awareness of indoor air pollution in domestic and commercial settings as well as environmental air pollution which will inform residents of the dangers which poor air quality poses to health as well as informing of potential behavioural changes which could be adopted to improve air pollution levels further.

- Nitrogen Dioxide, PM_{2.5} & PM₁₀ will be monitored throughout Stockton-on-Tees
- We will expand our air quality monitoring network
- Progress relating to Air Quality levels and actions within the Air Quality Strategy will be reported Annually
- Our Air Quality website and corporate social media channels will become platforms for sharing data and information
- We will discuss indoor and outdoor air quality with food businesses when required.
- We will raise awareness of the risks of poor indoor air quality with best practice advice to be shared
- We will work with schools to raise awareness and education around air quality and sustainability
- We will support national campaigns whilst also creating our own air quality campaigns/ awareness sessions
- We will work with allotment owners to raise awareness of air quality impacts associated with bonfires
- We will create a training course for residents and businesses in relation to Air Quality

Strategic measures

Within Stockton-on-Tees Borough Council we recognise that despite our Air Quality levels being good and below National Air Quality Objectives, we have a responsibility to both lead by example and implement feasible measures to improve both our own air quality levels and those within the Borough. The Strategic measures identified range from implementing additional digital technology to reduce the need for vehicle movements throughout the Borough to producing a Green Fleet and Sustainable Procurement Strategy to reduce emissions from our fleet vehicles whilst another key measure is to enhance our workforce’s knowledge in relation to indoor and environmental air quality to ensure our staff are well informed and able to take appropriate action with regards to air quality whilst going about their day-to-day roles.

We believe that by adopting these strategic measures we will not only improve air quality measures throughout the Borough, but we will also enable further reductions of our own emissions which will assist with us meeting our net zero targets as set out by our 10 year Environmental Sustainability and Carbon Reduction Strategy.

- We will explore ways to reduce our carbon footprint whilst working towards Net Zero emission targets
- We will develop a corporate travel plan
- We will expand our Air Quality Working Group to ensure delivery of this Air Quality Strategy
 - We will enhance staff knowledge in relation to indoor and environmental air quality
- We will apply for external funding for grants relevant to Air Quality
- We will consider air quality within Joint Strategic Needs Assessments
- We will take enforcement action and work to tackle fraud or mis-selling cases relating to green energy
 - We will continue to implement and explore new digital technology
- We will produce a Green Fleet and Sustainable Procurement Strategy
- A total life cost will be required for vehicles being purchased or leased
- We will reduce emissions from events

Reduce emissions from vehicles

The main source of air pollution within Stockton-on-Tees is from vehicle movements within our Borough. Although in recent years emissions from vehicle tailpipes have reduced due to tighter European emission standards and improved vehicle technology. Data in 2019 published by DEFRA identified that nationally 12% of all Particulate Matter and 35% of all Nitrogen Oxides are from road transport⁴².

Within Stockton-on-Tees we have identified the need to reduce emissions from vehicles and the measures listed should assist in achieving this priority. Whilst some of the measures listed relate to reducing emissions from our own Council fleet, we will also make improvements to the highways through upgrading Urban Traffic Management Control Systems and we will promoting active travel to reduce the number of vehicles on the road.

As well as emissions from moving vehicles we are also going to prioritise emissions from stationary vehicles through educational awareness campaigns. These campaigns will be undertaken at hotspot locations and where vehicle idling is within close proximity to sensitive receptors such as outside schools. An idling vehicle produces enough emissions to fill 150 balloons in one minute⁴³ and we therefore believe this is an area to be prioritised.

- We will tackle emissions from idling vehicles
- We will promote the use of car lease schemes offering zero and ultra-low emission vehicles internally
- We will implement local Hackney Carriage and Private Hire Licensing Policy
- We will explore ways to incentivise the Hackney Carriage and Private Hire trade to purchase electric and hybrid vehicles
- We will work with bus operators to upgrade their fleet and reduce emissions
- We will work with Tees Valley Combined Authority to develop an Electric Vehicle Strategy and implementation plan for the Tees Valley
- We will reduce vehicle emissions from our Fleet
- We will develop a local implementation plan as a sub-strategy to the Tees Valley Strategic Transport Plan
- We will upgrade Urban Traffic Management Control Systems
- We will promote active travel
- We will invest, support and monitor the installation of new cycle route infrastructure

⁴² [Air quality: explaining air pollution - GOV.UK](#)

⁴³ [\[Withdrawn\] Idling drivers could face higher fines under new government crackdown - GOV.UK](#)

Reduce emissions from domestic, industrial and agricultural sources

Although vehicle emissions are the highest source of air pollution within our Borough, emissions from domestic, industrial and agricultural sources contribute significantly to our air pollution levels.

On a national scale in 2019 DEFRA reported that the overall proportion of:

- Particulate Matter was 38% from wood and coal burning in domestic open fires and solid fuel stoves, 13% from solvent use and industrial processes with 16% from industrial combustion.
- Nitrogen Oxide emissions were 22% from energy generation and 19% from industrial combustion.
- Sulphur Dioxide emissions were 37% from energy generation, 22% from industrial combustion and 22% from domestic burning.
- Ammonia emissions were 88% from farming practices.
- Non-methane volatile organic compounds (NMVOCs) emissions were 54% from industrial emissions, 14% from agriculture and 8% from domestic and industrial combustion.⁴⁴

Domestic wood burning is a major source of air pollution and is the UK's largest source of particulate matter air pollution⁴⁵. Emissions associated with wood burning are released both into the atmosphere and within properties. In recent years legislative changes via *The Environment Act 2021* have given Local Authorities greater powers to tackle the sale of fuel for wood burning in addition to enhanced powers for non-compliance of the requirements of smoke control areas. To reduce the emissions from domestic burning we will review our existing smoke control areas which will provide greater protection to residents from the release of emissions associated with wood burning.

- We will review Smoke Control Boundaries within the Borough.
- Allegations of non-compliance within Smoke Control Area will be investigated and enforcement action will be taken where appropriate.
- We will ensure retailers selling solid fuel for use within domestic properties display the 'Ready to Burn' logo on their products.
- We will engage with the farming industry to reduce agriculture emissions.
- We will work to minimise emissions from industrial processes which hold a PartB permit.

⁴⁴ [Air quality: explaining air pollution - GOV.UK](#)

⁴⁵ [Air quality: explaining air pollution - GOV.UK](#)

New developments, construction, and planning

The construction sector is a significant contributor to air pollution especially dust emissions which are commonly associated with PM₁₀. At each stage of the construction process there is a significant opportunity for high levels of PM₁₀ to be generated and released into the air, this includes demolition of buildings, construction, earthworks, mud and dust entering the highway. There are further risks of emission to air through the plant and machinery used during the construction period.

We are therefore going to ensure that the levels of air pollution released from construction within the Borough is significantly reduced to protect the health of residents living in close vicinity to construction programmes whilst improving our air quality levels.

- We will implement a new Local Plan with strong links to Air Quality and Environmental Sustainability
- We will utilise the planning system to ensure emissions associated with construction, demolition and operational phases of developments are minimised.
- We will develop an Air Quality/ Low Emission Technical Advice Note to accompany the new Local Plan.
- We will ensure chimney stacks for wood burners discharge at appropriate heights.
- We will follow new national planning guidance to improve air quality

12. Action plan to achieve priorities

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Monitoring, reporting and increasing awareness of air quality	1	Nitrogen Dioxide, PM _{2.5} & PM ₁₀ will be monitored throughout Stockton-on-Tees.	Air quality levels will be monitored using continuous analysers.	Present to 2030	Environmental Health
			We will review all monitoring locations annually.	Annually	Environmental Health
			Should air quality levels regularly exceed National Objective values we will declare an Air Quality Management Area	Present to 2030	Environmental Health
Monitoring, reporting and increasing awareness of air quality	2	We will expand our air quality monitoring network.	Increase the number of diffusion tubes on the air quality monitoring network.	2025 to 2030	Environmental Health
Monitoring, reporting and increasing awareness of air quality	3	Progress relating to Air Quality levels and actions within the Air Quality Strategy will be reported annually.	Air quality levels will be reported annually within the Annual Status Report detailing current levels and trends.	Annually	Environmental Health
			Progress in relation to the actions within this strategy will be reported annually within the Annual Status Report.	Annually	Environmental Health and Air Quality Working Group
			Annual Status Reports will be publicly available following DEFRA approval.	Annually	Environmental Health

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Monitoring, reporting and increasing awareness of air quality	4	Our Air Quality website and corporate social media channels will become platforms for sharing data and information.	Information relating to high pollution forecasts and high pollution episodes will be publicised.	2025 to 2030	Comms
			We will promote the locations of Electric Vehicle charging points within our Borough.	2025 to 2030	Highways & Comms
			Hourly air quality data will be accessible via our website.	2025 to 2030	Comms
			We will promote air quality campaigns on our website and social media channels.	2025 to 2030	Comms, Environmental Health & Public Health
			We will make information available on our website relating to air quality.	2025 to 2030	Comms
Monitoring, reporting and increasing awareness of air quality	5	We will discuss indoor and outdoor air quality with food businesses when required.	Guidance to be distributed via Environmental Health Officers during routine inspections, as required.	2025 to 2030	Environmental Health and Public Health
Monitoring, reporting and increasing	6	We will raise awareness of the risks of poor	We will raise awareness of indoor air quality	2025 to 2030	Environmental Health, Public

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
awareness of air quality		indoor air quality with best practice advice to be shared.	We will work with local housing providers to offer advice, information and guidance about indoor air quality.	2025 to 2030	Health and Comms
Monitoring, reporting and increasing awareness of air quality	7	We will work with schools to raise awareness and education around air quality and sustainability.	We will create education projects for secondary schools.	Present to 2030	Env, Leisure and Green Infrastructure
			We will work with schools to encourage the uptake of the Let's Go Zero initiative.	Present to 2030	Env, Leisure and Green Infrastructure
			We will deliver a Key Stage 2 educational package including assemblies, lesson plans and information for pupils and parents regarding anti-idling.	Present to 2030	Environmental Health, Public Health
Monitoring, reporting and increasing awareness of air quality	8	We will support national campaigns whilst also creating our own air quality campaigns/ awareness sessions.	We will create and run our own campaigns as well as national campaigns for example bonfire night, anti-idling, indoor air pollution, Clean Air Day etc.	2025 to 2030	Environmental Health, Public Health and Comms
			Campaigns will be delivered in-person and/ or on social media.	2025 to 2030	Environmental Health, Public Health, Events and Comms

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
			We will raise awareness of the risks associated with air quality, to those who drive vehicles for a living e.g. hackney carriage and private hire driver as well as undertake taxi fleet driver training.	2025 to 2030	Environmental Health, Public Health, Licensing and Comms
Monitoring, reporting and increasing awareness of air quality	9	We will work with allotment owners to raise awareness of air quality impacts associated with bonfires.	Work with Stockton-on-Tees Borough Council allotment sites	2025 to 2030	Environmental Health
			Work with non-Stockton-on-Tees Borough Council allotment sites.	2025 to 2030	Environmental Health
Monitoring, reporting and increasing awareness of air quality	10	We will create a training course for residents and businesses in relation to Air Quality.	Create training course relating to air quality to raise awareness and promote behaviour changes.	2025 to 2030	Environmental Health, Public Health, Learning & Skills
Strategic measures	11	We will explore ways to reduce our carbon footprint whilst working towards Net Zero emission targets	We will undertake a programme of improvement works on our built assets to reduce running costs and enhance energy efficiency performance.	2024 to 2030	Place Development
			We will continue to promote the use of solar energy in our projects.	2024 to 2030	Env, Leisure and Green Infrastructure

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
			We will implement measures set out in our <i>Environmental Sustainability and Carbon Reduction Strategy</i> .	2024 to 2030	Env, Leisure and Green Infrastructure
			We will run Green Champions workshops to share good practice, promote sustainability in the workplace, reduce carbon emissions and engage other members of staff.	Present	Env, Leisure and Green Infrastructure
Strategic measures	12	We will develop a corporate travel plan	We will develop a corporate travel plan and adopt sustainable transport methods.	2024 to 2026	Highways
Strategic measures	13	We will expand our Air Quality Working Group to ensure delivery of this Air Quality Strategy.	We will expand the Air Quality Working Group to ensure more Council services engage with reducing air quality levels and create sustainable changes for the Authority and residents.	2025 to 2030	Environmental Health
			Members of the Air Quality Working group own actions within this Strategy which are to be implemented.	2025 to 2030	All
Strategic measures	14	We will enhance staff knowledge in relation to indoor and environmental air quality.	A mandatory air quality training package will be created for all Stockton-on-Tees Borough Council employees.	2025 to 2030	Env. H, Public Health & Learning and Development
			We will report to Health & Wellbeing Board on key updates relating to air quality.	2025 to 2030	Env. H & Public Health.

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Strategic measures	15	We will apply for external funding for grants relevant to Air Quality.	We will apply for grants such as DEFRA's Air Quality Grant to enhance awareness and/ or monitoring of air quality throughout the Borough.	2024 to 2030	Air Quality Working Group members
Strategic measures	16	We will consider air quality within Joint Strategic Needs Assessments.	We will consider air quality within Joint Strategic Needs Assessments	2024 to 2030	Council Wide, Public Health, Health and Wellbeing Board
Strategic measures	17	We will take enforcement action and work to tackle fraud or mis-selling cases relating to green energy.	We will investigate cases of fraud or mis-selling of green energy such as solar panels or heat pumps. Enforcement action will be taken in accordance with our Enforcement policy.	2024 to 2030	Trading Standards
Strategic measures	18	We will continue to implement and explore new digital technology.	New digital technology will be implemented for staff and service users which will reduce the number of vehicle trips throughout the Borough.	2024 to 2030	Digital Transformation
Strategic measures	19	We will produce a Green Fleet and Sustainable Procurement Strategy.	We will produce a Green Fleet Strategy and Sustainable Procurement Strategy.	2025 to 2030	Fleet and Air Quality Working Group

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Strategic measures	20	A total life cost will be required for vehicles being purchased or leased.	We will request all potential suppliers to submit a total life cost (TLC) for vehicles being purchased or leased.	2025 to 2030	Fleet
Strategic measures	21	We will reduce emissions from events	The Council's Event Service will endeavour to utilise local suppliers, where procurement policies allow, to reduce the carbon footprint.	2025 to 2030	Events
			The Council's Events Service will endeavour where possible to procure technical suppliers that offer the use of Solar and HVO generators to reduce the carbon impact to events delivery.	2025 to 2030	Events
			The Council will request, via the online 'Events on Council Land application' information on how the organisers event, will not adversely affect air quality.	2025 to 2030	Events
Reduce emissions from Vehicles	22	We will tackle emissions from idling vehicles	An anti-idling strategy will be created for Stockton-on-Tees Borough Council regarding fleet vehicles and contractors	2025 to 2030	Air Quality Working Group
			Where applicable, new vehicles on Stockton-on-Tees Borough Council's fleet will be fitted with anti-idling equipment.	2025 to 2030	Fleet

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
			Large contracts awarded through procurement will include a 'no vehicle engine idling' stipulation.	2025 to 2030	Procurement
			We will work with bus and coach operators to reduce unnecessary vehicle idling.	2025 to 2030	Highways
			We will undertake educational patrols in relation to idling in hotspot locations such as schools, taxi ranks, coach drop off points etc.	2024 to 2030	Environmental Health & Civic Enforcement
Reduce emissions from Vehicles	23	We will promote the use of car lease schemes offering zero and ultra-low emission vehicles internally.	We will promote the use of car lease schemes offering zero and ultra-low emission vehicles internally.	Present to 2030	Human Resources
Reduce emissions from Vehicles	24	We will implement local Hackney Carriage and Private Hire Licensing Policy	We will implement local Hackney Carriage and Private Hire Licensing Policy which requires the replacement of older vehicles for newer vehicles.	Present to 2030	Licensing
Reduce emissions from Vehicles	25	We will explore ways to incentivise the Hackney Carriage and Private Hire trade	We will explore ways to incentivise the Hackney Carriage and Private Hire trade to purchase electric and hybrid vehicles.	2024 to 2030	Licensing

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
		to purchase electric and hybrid vehicles.			
Reduce emissions from Vehicles	26	We will work with bus operators to upgrade their fleet and reduce emissions.	We will work with bus operators to introduce more green/ electric vehicles within Stockton-on-Tees highway infrastructure.	2024 to 2030	Highways
Reduce emissions from Vehicles	27	We will work with Tees Valley Combined Authority to develop an Electric Vehicle Strategy and implementation plan for the Tees Valley	We will work with Tees Valley Combined Authority to develop an Electric Vehicle Strategy and implementation plan for the Tees Valley	2025 to 2030	Highways

Reduce emissions from Vehicles	28	We will reduce vehicle emissions from our Fleet	We will reduce emissions from our fleet by following the five priority measures listed below:		
			1. We will reduce the number of vehicles within our fleet, and we will challenge the need for new vehicles.	From 2025	Fleet
			2. We will increase the number of electric vehicles within our fleet. Where any council department requires a fleet vehicle, they shall have at least one electric vehicle in their fleet by 2030 (if technology available meets the operational needs and budget)	From 2025	Fleet
			3. We will replace Fleet vehicles to the latest Euro Emission Standard if electric vehicle is not an option.	From 2025	Fleet
			4. Diesel vehicles will be purchased or leased if there are no low or zero emission options available that meet operational needs, have appropriate infrastructure available and can be purchased within available budget.	From 2025	Fleet

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
			5. All non-electric/ emission producing fleet vehicles will be subject to a 5% yearly fuel consumption reduction target for each Council department.	From 2025	Fleet
			We will work to remove all diesel vehicles from the Councils fleet where appropriate/ green technology meets operational requirements in-line with the Council's Net Zero and Carbon Reduction Policy.	From 2025	Fleet
			Promote behavioural change, reducing mileage, size of fleet, optimise vehicle resources across departments.	From 2025	Fleet
			We will use technology to carryout checks, audits and inspections to reduce unnecessary journeys.	2025 to 2030	Fleet
			We will consider using Hydrotreated Vegetable Oil (HVO) fuel in our current fleet.	2025 to 2030	Fleet

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Reduce emissions from Vehicles	29	We will develop a local implementation plan as a sub-strategy to the Tees Valley Strategic Transport Plan	We will write and consult on a local implementation plan for Stockton-on-Tees.	2024 to 2025	Highways
Reduce emissions from Vehicles	30	We will upgrade Urban Traffic Management Control Systems	Stockton-on-Tees Borough Council will work to upgrade Urban Traffic Management Control Systems which will allow the implementation of traffic management schemes and strategies which reduce traffic congestion and air quality.	Present to 2026	Highways
Reduce emissions from Vehicles	31	We will promote active travel	We will promote active travel to reduce road emissions.	2024 to 2030	Highways, Public Health, Fleet and Comms.
			To continue promoting the work of The Active Travel Hub which supports cycle and walking routes.	2024 to 2025	Highways, Public Health and Comms.
Reduce emissions from Vehicles	32	We will invest, support and monitor the installation of new cycle route infrastructure.	We will invest in and monitor the installation of new cycle routes to reduce road emissions.	Present to 2030	Highways

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Reduce emissions from domestic, industrial and agricultural sources	33	We will review Smoke Control Boundaries within the Borough.	Identify areas where significant development has taken place outside of existing smoke control areas and where necessary either create new smoke control areas or expand existing smoke control areas.	2025-2030	Environmental Health
Reduce emissions from domestic, industrial and agricultural sources	34	Allegations of non-compliance within Smoke Control Area will be investigated and enforcement action will be taken where appropriate.	Enforcement action will be followed in accordance with Stockton-on-Tees Borough Council's Enforcement Policy where advice and education is unsuccessful and there is continual non-compliance in relation to the requirements of a Smoke Control Area.	2025-2030	Environmental Health
Reduce emissions from domestic, industrial and agricultural sources	35	We will ensure retailers selling solid fuel for use within domestic properties display the 'Ready to Burn' logo on their products.	We will undertake inspections of retailers to ensure the 'Ready to Burn' logo is on solid fuel.	Ongoing to 2030	Environmental Health
			We will take enforcement action in accordance with Stockton-on-Tees Borough Council's Enforcement Policy for repeated non-compliance.	Ongoing to 2030	Environmental Health
Reduce emissions from domestic, industrial and agricultural sources	36	We will engage with the farming industry to reduce agriculture emissions.	We will encourage farmers to follow the Code of Good Agriculture Practice for Reducing Ammonia Emissions produced by DEFRA.	2025-2030	Environmental Health

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
Reduce emissions from domestic, industrial and agricultural sources	37	We will work to minimise emissions from industrial processes which hold a Part B permit.	Undertake a programme of inspections and respond to complaints.	Present to 2030	Environmental Health
			Take appropriate enforcement action for repeated non-compliance.	Present to 2030	Environmental Health
			Permits will be reviewed and updated following new "Best Available Techniques" or updated Process Guidance Notes released by DEFRA	When Applicable	Environmental Health
			We will work with industries including those who hold a Part B permit to educate and where required assist with achieving net zero.	2025 to 2030	Environmental Health & Env, Leisure and Green Infrastructure
New developments, construction and planning	38	We will implement a new Local Plan with strong links to Air Quality and Environmental Sustainability	A new local plan will be created which will detail requirements for planning applications for developers in relation to air quality.	2025 to 2030	Planning
New developments, construction and planning	39	We will utilise the planning system to ensure emissions associated with construction, demolition and operational	Low emission strategies for construction sites will be requested to reduce emissions from Non-Road Mobile Machinery during both planning application and/ or Section 61 applications.	2025 to 2030	Environmental Health

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
		phases of developments are minimised.	New developments will incorporate good neighbourhood design to minimise vehicle journeys.	2025 to 2030	Place Development
			We will promote the use of Heat Pumps on new developments via the planning system.	Present to 2030	Env, Leisure and Green Infrastructure
			We will encourage the provision of Electric Vehicle charging points in new developments.	Present to 2030	Env, Leisure and Green Infrastructure
			We will request air quality assessments and mitigation measures for developments and demolitions which will likely impact upon air quality levels.	Present to 2030	Environmental Health
			We will review and update our air quality planning conditions.	Annually	Environmental Health
New developments, construction and planning	40	We will develop an Air Quality/ Low Emission Technical Advice Note to accompany the new Local Plan.	We will utilise local air quality data to develop a Technical Note to accompany the local plan. The note will include the use of shelter belts to reduce emissions of particulates and minimise erosion which may be funded through grants from the Woodland Trust	2025 to 2030	Planning

Priority	No	Strategy action	How will action be achieved?	Timescale	Responsibility
New developments, construction and planning	41	We will ensure chimney stacks for wood burners discharge at appropriate heights.	To assess applications where chimneys are proposed to ensure smoke dispersal at 1 metre above the height of the eaves of a building.	Present to 2030	Environmental Health
New developments, construction and planning	42	We will follow new national planning guidance to improve air quality	We will ensure new developments are considered in accordance with any new national planning policies or guidance relating to air quality.	Present to 2030	Planning

13. Contact us

If you would like a copy of this document in another format or language or require any advice or guidance on Air Quality:

Visit: Stockton-on-Tees Borough Council, Dunedin House, Columbia Drive, Thornaby, Stockton-on-Tees, TS17 6BJ

Call: 01642 526575

Email: Environmental.Health@Stockton.gov.uk

Visit: www.stockton.gov.uk



References

- 1 Legislation.gov.uk (no date) *The National Ceiling Regulations 2018*. Available At: <https://www.legislation.gov.uk/uksi/2018/129/contents/made>
- 2 Legislation.gov.uk (no date) *Directive 2008/50/EC of The European Parliament and of the Council*. Available At: <https://www.legislation.gov.uk/eudr/2008/50/contents>
- 3 Legislation.gov.uk (no date) *Environmental Protection Act 1990*. Available At: <https://www.legislation.gov.uk/ukpga/1990/43/section/79>
- 4 Legislation.gov.uk (no date) *Clean Air Act 1993*. Available At: <https://www.legislation.gov.uk/ukpga/1993/11/contents>
- 5 Legislation.gov.uk (no date) *Environment Act 1995*. Available At: <https://www.legislation.gov.uk/ukpga/1995/25/contents>
- 6 Legislation.gov.uk (no date) *The Air Quality Standards Regulations 2010*. Available At: <https://www.legislation.gov.uk/uksi/2010/1001/contents>
- 7 Legislation.gov.uk (no date) *The Environmental Permitting (England and Wales) Regulations 2016*. Available At: <https://www.legislation.gov.uk/uksi/2016/1154/contents>
- 8 Legislation.gov.uk (no date) *Directive 2010/75/EU of the European Parliament and of the Council*. Available At: <https://www.legislation.gov.uk/eudr/2010/75/contents>
- 9 Legislation.gov.uk (no date) *The Air Quality (Domestic Solid Fuels Standards) (England) Regulations 2020*. Available At: <https://www.legislation.gov.uk/uksi/2020/1095/contents/made>
- 10 Legislation.gov.uk (no date) *The Environment Act 2021*. Available At: <https://www.legislation.gov.uk/ukpga/2021/30/contents>
- 11 Legislation.gov.uk (no date) *The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023*. Available At: <https://www.legislation.gov.uk/uksi/2023/96/contents/made>
- 12 Gov.uk (2019) *Clean Air Strategy 2019*. Available At: <https://www.gov.uk/government/publications/clean-air-strategy-2019>
- 13 Gov.uk (2023) *Environmental Improvement Plan 2023*. Available At: <https://www.gov.uk/government/publications/environmental-improvement-plan>
- 14 Gov.uk (2023) *Air Quality Strategy: Framework for Local Authority Delivery*. Available At: <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england/air-quality-strategy-framework-for-local-authority-delivery>
- 15 World Health Organization (2021) *WHO Global Air Quality Guidelines: Particulate Matter (PM_{2.5} and PM₁₀), Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide*. Available At: <https://www.who.int/publications/i/item/9789240034228>
- 16 World Health Organization (2010) *WHO Guidelines for Indoor Air Quality: Selected Pollutants*. Available At: <https://www.who.int/publications/i/item/9789289002134>

- 17 National Institute for Care and Excellence (2020) *Indoor Air Quality At Home*. Available At: <https://www.nice.org.uk/guidance/ng149>
- 18 Asthma + Lung UK (2024) *Air Pollution and Allergies At Home*. Available At: <https://www.asthmaandlung.org.uk/living-with/indoor-air-pollution/home#what-is-indoor-air-pollution>
- 19 The Air Quality Expert Group (2022) *Air Quality Expert Group: Indoor Air Quality*. Available At: https://uk-air.defra.gov.uk/assets/documents/reports/cat09/2211011000_15062022_Indoor_Air_Quality_Report_Final.pdf
- 20 & 21 Gov.uk (2018) *Health Matters: Air Pollution*. Available At: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>
- 22 Chief Medical Officer's Annual Report (2022). *Air Pollution*. Available At: <https://assets.publishing.service.gov.uk/media/639aeb81e90e0721889bbf2f/chief-medical-officers-annual-report-air-pollution-dec-2022.pdf>
- 23 Netcen (2006) *Air Quality and Social Deprivation In The UK: An Environmental Inequalities Analysis*. Available At: https://uk-air.defra.gov.uk/assets/documents/reports/cat09/0701110944_AQinequalitiesFNL_AEAT_0506.pdf
- 24 United States Environmental Protection Agency (2024) *Particulate Matter (PM) Basics*. Available At: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM>
- 25 & 42 DEFRA (2019) *Air Quality: Explaining Air Pollution- at a glance*. Available At: <https://www.gov.uk/government/publications/air-quality-explaining-air-pollution/bd752085-6bbc-4ae6-80fb-4c02b919d8b2>
- 26 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: Fraction of Mortality Attributed To Air Pollution (new method) 2022 proportion %*. Available At: <https://fingertips.phe.org.uk/search/air%20quality#page/3/gid/1/pat/6/ati/502/are/E06000004/iid/93861/age/230/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/car-do-0>
- 27 Gov.uk (2018). *Health Matters: Air Pollution*. Available At: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>
- 28 DEFRA (2017) *Improving Air Quality In The UK: Tackling Nitrogen Dioxide In Our Towns and Cities: Draft UK Air Quality Plan For Tackling Nitrogen Dioxide*. Available At: https://consult.defra.gov.uk/airquality/air-quality-plan-for-tackling-nitrogen-dioxide/supporting_documents/Draft%20Revised%20AQ%20Plan.pdf
- 29 Gov.uk (2018). *Health Matters: Air Pollution*. Available At: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>
- 30 National Atmospheric Emissions Inventory (2024) *Nitrogen Oxides*. Available At: <https://naei.energysecurity.gov.uk/node/29>
- 31 DEFRA (2024) *Nitrogen Dioxide (NO2)*. Available At: <https://www.gov.uk/government/statistics/air-quality-statistics/nitrogen-dioxide>
- 32 & 33 DEFRA (2024) *Particulate Matter (PM10/PM2.5)*. Available At: <https://www.gov.uk/government/statistics/air-quality-statistics/concentrations-of-particulate-matter-pm10-and-pm25>

- 34 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: Fraction of Mortality Attributed To Air Pollution (new method) 2022 proportion %*. Available At: <https://fingertips.phe.org.uk/search/air%20quality#page/3/gid/1/pat/6/ati/502/are/E06000004/iid/93861/age/230/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/car-do-0>
- 35 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: Lung Cancer Registration 2017-19. Directly Standardised Rate Per 100,000*. Available At: https://fingertips.phe.org.uk/search/lung%20cancer#page/3/gid/1/pat/6/ati/502/are/E06000004/iid/1205/age/1/sex/4/cat/-1/ctp/-1/yr/3/cid/4/tbm/1/page-options/car-ao-0_car-do-0
- 36 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: COPD: QOF (all ages) 2023/24 proportion %*. Available At: <https://fingertips.phe.org.uk/respiratory-disease#page/3/gid/8000003/pat/6/ati/502/are/E06000004/iid/253/age/1/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/car-do-0>
- 37 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: Hospital Admissions Due To Coronary Heart Disease 2022/23. Directly Standardised Rate Per 100,000*. Available At: <https://fingertips.phe.org.uk/search/coronary%20heart%20disease#page/3/gid/1938133108/pat/6/par/E12000001/ati/502/are/E06000004/iid/90988/age/1/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/car-do-0>
- 38 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: CHD: QOF Prevalence (all ages) 2023/24 Proportion %*. Available At: <https://fingertips.phe.org.uk/search/coronary%20heart%20disease#page/3/gid/1/pat/6/ati/502/are/E06000004/iid/273/age/1/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1/page-options/car-do-0>
- 39 Department of Health and Social Care (2024) *Fingertips: Public Health Profiles: Asthma: QOF Prevalence (6+ Yrs) 2023/24 Proportion %*. Available At: <https://fingertips.phe.org.uk/search/asthma#page/3/gid/1/pat/6/par/E12000001/ati/502/are/E06000004/iid/90933/age/314/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1>
- 40 Stockton-on-Tees Borough Council (2024) *Environmental Sustainability and Carbon Reduction Strategy 2022- 2032*. Available At: https://www.stockton.gov.uk/media/3265/Environmental-Sustainability-and-Carbon-Reduction-Strategy-2022-2032/pdf/Environmental_Sustainability_Carbon_Reduction_Strategy_2022-2032_Accessible.pdf?m=1663143148380
- 41 Stockton-on-Tees Borough Council (2024) *Council Plan 2024*. Available at: <https://www.stockton.gov.uk/council-plan-2024>
- 43 Gov.uk (2019) News Story: Idling Drivers Could Face Higher Fines Under New Government Crackdowns. Available At: <https://www.gov.uk/government/news/idling-drivers-could-face-higher-fines-under-new-government-crackdown>