

Air Quality Delivery Plan

Environmental Protection

2021 - 2025

carmarthenshire.gov.uk

Cyngor **Sir Gâr**
Carmarthenshire
County Council



Contents

Purpose	1
The Health Impact	1
Carmarthenshire's Air Quality, what's the current position?	2
Nitrogen Dioxide	3
The Law	3
Welsh Government's Clean Air Plan	3
Alignment with other Policies and Plans	4
Carmarthenshire's Well-being Objectives	6
Delivering Improvements	8
Action Plan measures	Appendix 1

Clean Air in Carmarthenshire

Purpose

The purpose of this Plan is to set out, at a corporate level, the Council's position on air quality and how we plan to deliver improvements.

Carmarthenshire's Corporate strategy 2018-2023 'Moving Forward in Carmarthenshire' outlines the council's vision for the future in 15 well-being objectives under four key themes – To support residents to start well, live well and age well in a healthy, safe and prosperous environment. It also sets out a five-year plan of projects incorporating 15 Well-being objectives, that seeks to continuously improve economic, environmental, social and cultural well-being in the County. This air quality delivery plan outlines a number of measures to improve air quality in the County and supports six of these Corporate wellbeing objectives further.

This document has been developed with several departments and divisions within the Council. Its development has included Environmental Protection, Environment, Transport Planning, Highways and Infrastructure, Sustainable Development and Regeneration. The Council will also engage with external partners across the County and beyond in the process of progressing this plan, because the improvements required cannot be delivered by the Council alone.

The Health Impact

In 2019 The World Health Organisation (WHO) described air pollution as the largest environmental risk to our global health, and increasing evidence indicates that poor air quality significantly contributes towards several preventable illnesses and early deaths.

Air pollution threatens all ages and particularly the vulnerable such as older people, children, pregnant women and people with existing medical conditions. Long-term exposure to air pollution can cause chronic conditions such as cardiovascular and respiratory diseases as well as lung cancer, leading to reduced life expectancy.

In Wales, the estimated burden of poor air quality on early deaths is in an equivalent range of between 1,000 and 1,400 deaths each year and DEFRA has estimated that Nitrogen Dioxide (NO₂) contributes to shortening lives by an average of around 5 months.

Targeting effective air quality management also requires an understanding of the relationship between air pollution and the wider health determinants, as evidence suggests that poor air quality is often linked to wider socio-economic factors.

Carmarthenshire's Air Quality- What is the current position?

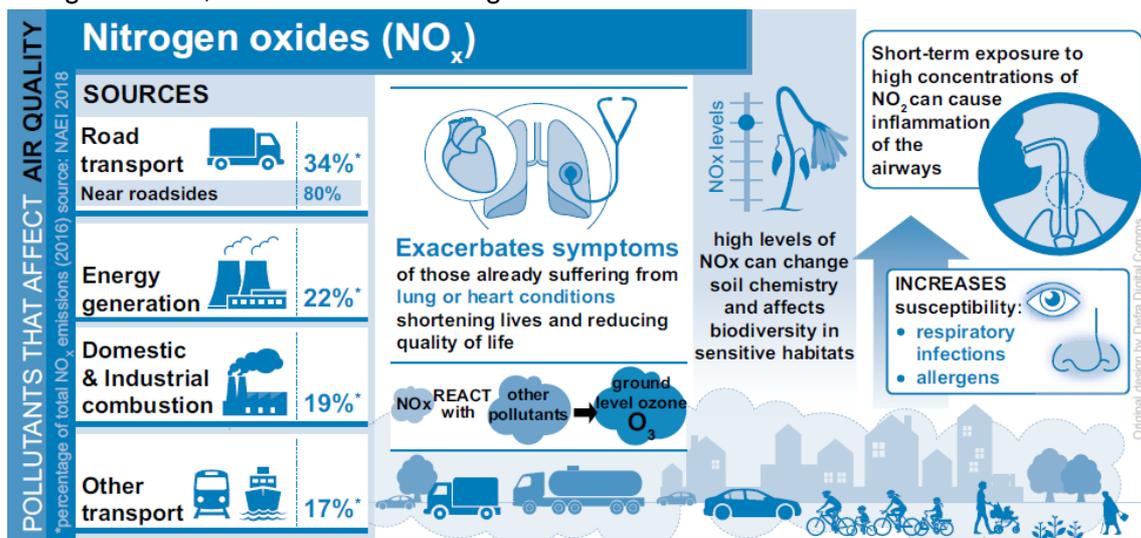
- We have identified that the key pollutant most relevant to Carmarthenshire is NO₂. The main source of NO₂ emissions in Carmarthenshire is road traffic emissions. We have developed a monitoring network that follows some of our busiest roads and most congested streets and we continue to monitor levels of NO₂ to observe the impact from any improvement measures delivered and any potential impact from future development;
- We also continue to assess potential impacts from Particulates (PM₁₀) arising from new industry and development proposals to ensure that dust is minimised, so it does not adversely impact on human health, the local ecology or cause a nuisance. We also regulate 70 industrial premises under the Environmental Permitting regime;
- Three areas in the County have been declared as Air Quality Management Areas (AQMA's), located in Llandeilo, Carmarthen and Llanelli Towns as a result of Nitrogen Dioxide levels exceeding the National Air Quality Objective. Action plans have been developed to deliver specific measures with the aim of improving air quality in these Towns, however we also recognise the importance of enhancing air quality across the County wherever possible;
- During 2020, the Covid-19 Pandemic several restrictions were imposed on our normal behaviours which significantly affected how we travelled and where we travelled to. Non-essential trips were restricted, several businesses and schools had to close, workers were encouraged to work from home where possible, socialising with other households was limited and there were times we were told to 'stay local' in Wales;
- This change in behaviour resulted in much fewer vehicles on the road, especially during the height of the lockdown periods. The public embraced low pollution behaviours such as walking and cycling in their local areas whilst adapting to work from home. The benefits of fewer vehicles on the road were recognised nationwide. This provided an opportunity to observe the impact of reduced traffic on our local air quality and identify where greater effort is needed; and
- In Carmarthenshire, levels of NO₂ significantly decreased during the 'lockdown' periods of 2020, and particularly within the declared AQMA's. The areas that usually report with the highest levels of NO₂ seemed to benefit the greatest, and for the first year since 2005 no monitoring sites within the County reported an exceedance of the Annual Air Quality Objective (AQO).

Air pollution causes underlying health conditions that can make people more susceptible to severe health outcomes of COVID-19, and as we continue to battle the virus, we recognise that cleaner air is more important than ever.

Nitrogen Dioxide (NO₂)

Nitrogen dioxide is a gas that is produced with nitric oxide (NO) by combustion processes and together they are often referred to as oxides of nitrogen (NO_x). The largest source is emissions from diesel light duty vehicles (cars and vans) and there has been significant growth in these vehicle numbers over the last 10 years.

In general, road transport and non- road transport (rail, aviation, and domestic shipping) is responsible for 50% of NO_x emissions and at the roadside road transport is responsible for around 80% of NO_x concentrations. Other sources include industrial combustion processes, power generation, and domestic burning.



The Law

As part of our statutory functions under Local Air Quality Management, The Environment Act 1995 places a duty on us to periodically review and assess air quality within our area. There are key pollutants that should be considered, and they are set out in legislation. Each of the key pollutants has a standard that should not be breached. The standards (or objectives) have been set at levels based on current scientific information which are designed to protect health and the environment. The Air Quality Objectives are set out in the Air Quality Standards (Wales) Regulations 2010.

The Welsh Government Clean Air Plan

Welsh Government's Clean Air Plan 'Healthy Air, Healthy Wales (2020) sets out a 10-year pathway to achieving cleaner air. They have structured the plan around four core themes, with actions to enable collaborative approaches to reducing air pollution.

- **People:** Protecting the health and well-being of current and future generations;
- **Environment:** Taking action to support our natural environment, ecosystems and biodiversity;

- **Prosperity:** Working with industry to reduce emissions, supporting a cleaner and more prosperous Wales; and
- **Place:** Creating sustainable places through better planning, infrastructure and transport.

We recognise the importance of aligning our aims with national policy to improve air quality in our Carmarthenshire, and to help meet government targets. At the time of writing this plan, a white paper for the Clean Air (Wales) Bill has also been published, which we will closely follow and incorporate into our plans to frame a positive outlook.

Some actions included in the Clean Air Plan, however, will be led by Welsh Government and may not be directly delivered by Carmarthenshire County Council e.g.the delivery of a new South Wales Metro system which will support regional and local transport plan priorities. Other topics which may require further consideration as they progress by Welsh Government include:

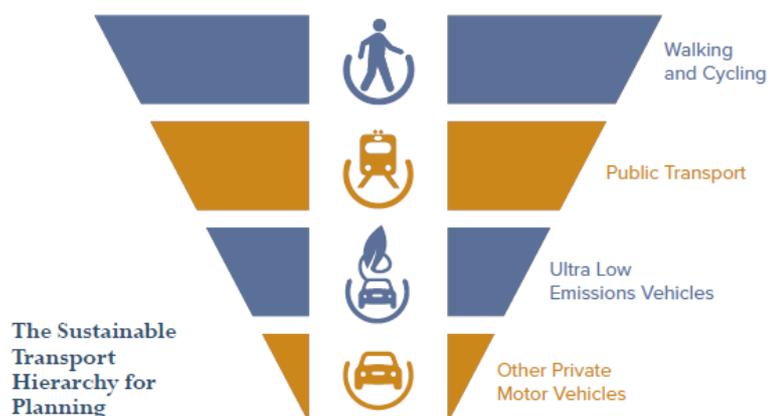
- Anti-Idling enforcement, which is currently subject to national debate;
- The Clean Air/ Low Emission Zones framework, which is under review;
- Revisions to Smoke Control Regulations; and
- Changes for controlling pollution from domestic solid fuel burning.

Alignment with other Policies and Plans

In carrying out our functions under Part IV of the 1995 Act, due regard is given to the policy guidance issued by Welsh Government ‘Local Air Quality Management in Wales’ and the five ways of working as set out by the Well-being and Future Generations (Wales) Act 2015 are adopted when conducting out our functions to manage local air quality.

Air Quality Planning Policy

Clear guidance in respect of a range of Environmental Protection matters are contained within Planning Policy Wales (PPW) Edition 10 (2018), to maximise health and well-being through sustainable development, whilst tackling climate change and making places more resilient. In relation to the impact of development on Air Quality Management Areas; minimising exposure to air pollution by incorporating good design and mitigation. The Sustainable Transport hierarchy has been adopted in this Air Quality delivery plan to reduce the need to travel and prioritise active and sustainable transport through the planning process. PPW and the National Development Framework can be used directly in the decision-making process where an LDP is silent or out of date on an issue.



Carmarthenshire Council's LDP

Carmarthenshire County Council is in the process of preparing the revised Local Development Plan (LDP) for its area. The current LDP was adopted by the County Council on 10th December 2014 and can be found [here](#).

Whilst development proposals should be considered against the policies and provisions of the Plan as a whole (along with other relevant considerations and policies), the most notable LDP policies in relation to Air Quality is EP2: Pollution, TR2: Location of Development – Transport Considerations, TR3 – Highways in Development Design Considerations, TR4 – Cycling and Walking. Other policies regarding Sustainable and High-quality Design, Ecological Corridors and Networks, Major Tourism, Town Centres, Renewable Energy and Minerals are also aligned to consider air quality benefits and implications.

Local Transport Plans and Strategies

The authority historically produced a Local Transport Plan; however, this was incorporated into a Regional Transport Plan which had been established under the direction of the Welsh Government. The region covers the unitary authorities of Neath-Port Talbot, Swansea, Carmarthenshire and Pembrokeshire. The Regional Transport Plan is now no longer being utilised in the same way but the partnership arrangement with the other authorities remains in place and they have developed a combined Local Transport Plan for the Swansea Bay City Region covering the period 2015 – 2020. Further information on the Local Transport Plan can be found [here](#). The Local Air Quality Management work that fed into the Regional Transport Plan work is given due regard within the Local Transport Plan, with the policy and infrastructure interventions tailored to help improve air quality and minimise air pollution from transport sources.

Active Travel Plans and Strategies

It is acknowledged that NO₂ from road traffic is the primary cause for concern for Carmarthenshire. Any measures that can encourage and facilitate active travel are therefore to be welcomed. The Active Travel (Wales) Act 2013 places a statutory requirement on Local Authorities to identify and improve routes for walking and cycling, which includes the publication of maps to identify suitable routes, and to provide links within key locations, such as places of work, education etc. Carmarthenshire County Council has published its integrated network maps, which can be found [here](#).

This also ties in with the Council's long term aim of becoming the Cycling Hub of Wales. Further information on Carmarthenshire's cycling strategy can be found [here](#).

Supporting Carmarthenshire’s Well-being Objectives

Carmarthenshire’s Corporate Strategy 2018-2023 Vision is summed up as:

*“Life is for living, let’s start, live and age well
in a healthy, safe and prosperous environment”*

The Corporate Strategy includes 13 Well-being objectives to meet this vision. By working in partnership to deliver improvements to air quality, we will also address a range of cross cutting benefits, which can further support the following six Council Well-being Objectives:

 <p style="text-align: center;">Well-being Objective 2 Start Well - Help children live healthy lifestyles</p>	
Air Quality Impact	<i>We recognise the impact that poor air quality can have on children’s development, cognitive abilities, and health. Children are specifically vulnerable, even from foetal development as their lungs, organs and brains are developing.</i>
Air Quality Delivery Plan Contribution	<p>We will</p> <ul style="list-style-type: none"> • Liaise with schools and the Healthy School’s Initiative to promote active travel campaigns such as walk/cycle to school days and the National Clean Air Day; • continue to study air quality around the school yard in our Air Quality Management Areas, raising awareness, encouraging active travel to school and promoting anti-idling at the school gates. We don’t want traffic around the school gate, enforcement activity is in place to discourage parents/carers from contravening TRO’s at school gate; and • Encourage people to walk to school by developing behavioural change programme and work with communities to develop bids for infrastructure funding to develop safe routes to school. • Promote the use of school travel plans.
 <p style="text-align: center;">Well-being Objective 7 Live Well - Help people live healthy lives (tackling risky behaviour and obesity)</p>	
Air Quality Impact	<i>Sustainable communities support people to live healthy lives and improved pedestrian connectivity can support active travel options to reduce traffic pollution.</i>
Air Quality Delivery Plan Contribution	<p>We will</p> <ul style="list-style-type: none"> • Continue to monitor air quality (nitrogen dioxide) for the residents and visitors in the County. This will be carried out by regular assessments and where necessary, sampling programmes; • Promote sustainable placemaking through the development process and our Local Development Plan;

	<ul style="list-style-type: none"> • Continue to improve Walking and Cycling Linkages; • Provide Safer Routes in communities to encourage and support active travel as above; and • Create low emission options by providing electric bike hire schemes and increasing access the electric vehicle charging points across the County. We will also continue to develop infrastructure to support the growth of electric cars.
--	--



Well-being Objective 9
Age Well - Support older people to age well and maintain dignity and independence in their later years

Air Quality Impact	<i>Good health is a key factor to aging well. Older people are vulnerable to more severe ill-health conditions associated with air pollution as it can cause lung and heart disease and emerging evidence suggests that areas with very poor air quality can increase the risk of dementia.</i>
---------------------------	---

Air Quality Delivery Plan Contribution	<p>We will</p> <ul style="list-style-type: none"> • Take a preventative approach to support health and well-being in the County; and • Through regular reviews and assessment of our transport routes, industry and developing communities, monitor air quality risks to minimise long term exposure to pollutants that may adversely impact health.
---	---



Well-being Objective 10
Healthy & Safe Environment - Look after the environment now and in the future

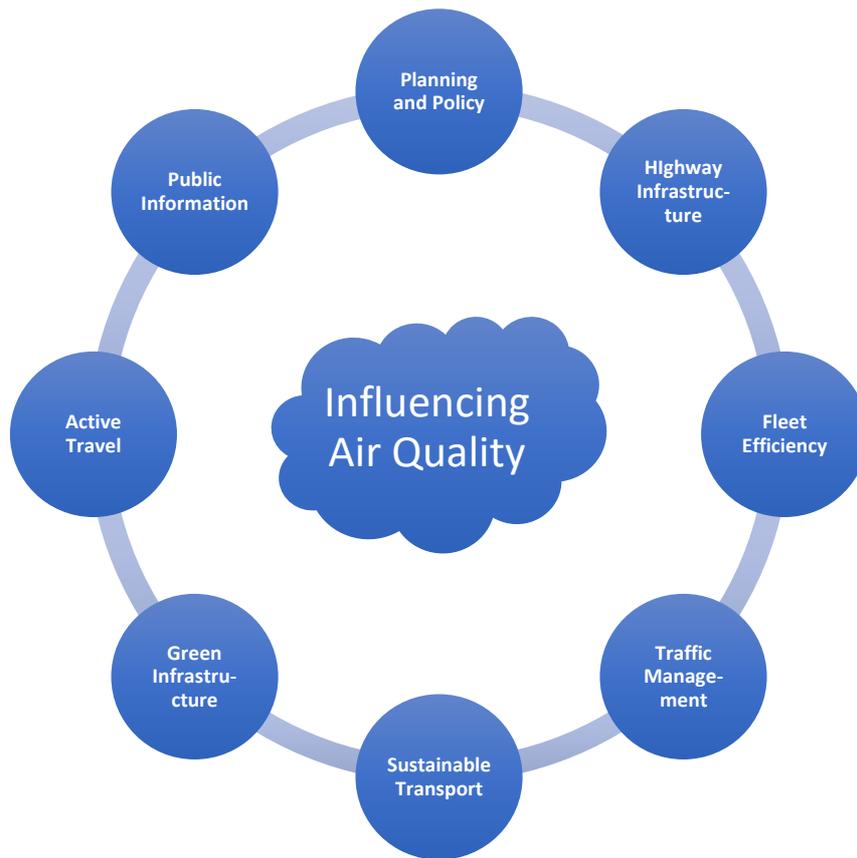
Air Quality Impact	<i>Air pollution has direct impacts on the natural environment, contributing to climate change, reducing crop yields, and polluting oceans. Cleaner air will directly benefit animals and habitats as well as creating a better environment for everyone to live, work and thrive in. Good quality energy efficient homes can also have a significant effect on reducing fuel use polluting the atmosphere.</i>
---------------------------	---

Air Quality Delivery Plan Contribution	<p>We will</p> <ul style="list-style-type: none"> • Through the planning process, promote sustainable places with good pedestrian linkages, green infrastructure, travel plans and sustainable transport options; • Protect our environment and ecological habitats from industry under the environmental permitting regime; • Assess the impacts of development on local air quality and natural habitats from both the construction and operational phases; • Monitor Nitrogen Dioxide in our Air Quality Management Areas some of our busiest roads and assess other potential impacts; • Utilise policy guidance and developmental control to minimise pollution impacts and improve air quality where possible; and
---	--

	<ul style="list-style-type: none"> Promote the increased use of renewable energy and support measures to become carbon neutral by 2030.
 Well-being Objective 11 Healthy & Safe Environment - Improve the highway and transport infrastructure and connectivity	
Air Quality Impact	<i>Highway Infrastructure can influence air pollution by lowering speed limits, reducing congestion, promoting active travel with safe cycle and footways. Access to electric vehicle charging points across the County can also support the uptake of lower emission vehicles.</i>
Air Quality Delivery Plan Contribution	We will <ul style="list-style-type: none"> Improve the cycle network adopt public cycle hire schemes; Expand our active travel routes and continue to provide safer routes for communities; Continue to work with Welsh Government to help deliver at Llandeilo Bypass to improve air quality and road safety in Llandeilo town; Continue to work with Regional local Authority Partners to develop the plans for a South Wales Metro; Reduce speed limits improve pedestrian safety around schools and residential areas with 20mph zones; Work with South Wales Trunk Road Agency to deliver Strategic Highways Improvements; Seek to improve emissions from our own fleet; and Increase the provision of electric vehicle charging points across the County.
 Well-being Objective 13 Better Governance and use of Resources	
Air Quality Impact	<i>Sustainable delivery models through investment and efficiency savings will support different ways of working and reduce the Council's contribution to air pollution.</i>
Air Quality Delivery Plan Contribution	We will <ul style="list-style-type: none"> Support remote and agile working where it can reduce the need for staff travel, minimising waste travel time, mileage and increasing productivity; and Support Digital Transformation to support staff flexible working arrangements, and digital access to services to reduce customer travel.

Delivering Improvements to Air Quality

The responsibility of delivering such improvements requires a collaborative approach with several internal and external partners, because there are many factors that can influence the delivery of clean air in Carmarthenshire. The main themes are summarised below:



Each theme in the plan acts as a framework for the creation of policies, projects and schemes, to invite flexible, co-beneficial solutions to address a spectrum of issues. Each theme can deliver contributions towards improving air quality but collectively those impacts can be significant. It may not always be possible to quantify emission reductions directly attributed to certain actions, as many influencing factors can play their part. Nevertheless, our aim is to reduce pollution emanating from transport, enable and support our residents to choose more sustainable modes of transport and increase their active travel.

Ultimately, our goal is to reduce Nitrogen Dioxide levels within our AQMA Towns, not only to meet the national air quality objectives but to enhance our air quality for residents and visitors in the County. Our efforts must be sustainable to continue the trend for future generations. In turn, we will thereby help reduce the risk of ill-health cause by air pollution and support our Well-being objectives.

We will aim to deliver the following four key objectives:

Objective 1. Reducing Congestion:

actions robust enforcement of TRO's, Improvements to infrastructure, promoting more sustainable travel such as car sharing, active travel, walk the last mile.

Objective 2. Modal Shift:

Promoting and developing public transport tie into the development of the regional Metro, demand management prioritising short stay parking in town centres to ensure spaces are available. Active Travel etc. Safer Routes in Communities walking routes to schools. Regional METRO transportation.

Objective 3. Improving Air Quality:

ULEVs. Smoke controls wood burning stoves, green space initiatives.

Objective 4. Know what is happening:

Provide robust data capture and model air quality and transport movements.

An Air Quality Action planning steering group has been set up with key stakeholders across a range of key services to deliver actions predominantly within our AQMA's but also with a view to improve air quality across the whole County. These measures incorporate many actions currently underway to deliver the AQMA action plans with further actions planned over the next few years.

The detailed actions can be found in the attached appendix. Progress on its delivery will be reported annually to Welsh Government and indicative timescales have been framed for measuring our progress in these areas and to keep actions in focus.