Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

Neath Port Talbot County Borough Council Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

2024-2029

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It is required due to the Air Quality Management Area (AQMA) declared for Margam-Taibach, due to exceedances of the national Air Quality Objective (AQO) for daily mean particulate matter (PM_{10}). Whilst the AQO was not exceeded from 2018 through to 2022, Prince Street 2 did exceed the daily mean AQO in 2023; hence the AQMA should continue to remain in place.

This action plan outlines the action we will take to improve air quality in Neath Port Talbot between 2024 and 2029 to ensure that the daily mean PM_{10} AQO is met. It replaces the previous action plan which ran from 2012 to 2024.

Projects delivered through the past action plan include:

- Knowledge sharing and collaborative working through the PM_{10} Steering Group, Data Team, Regulator's Team and Industrial Forum, with Welsh Government, Natural Resources Wales, and permitted industrial operators (Tata, Tata suppliers and sub-contractors and Costain).
- NPTCBC provides email alerts to other organisations to help resolve emerging poor air quality situation. These alerts are based on automatic PM_{10} monitoring stations operated by NPTCBC.
- Ongoing dust reduction programme/improvement works at the Steelworks, aimed at identifying and quantifying sources of dust. This is one of a number of interventions carried out by Natural Resources Wales, together with industry operators, and implemented through the IPPC permitting process.
- Ongoing planning policy requirements for proposed new or expanded activities or developments with the potential to impact the AQMA will be reviewed, and where these pose a significant risk to Air Quality Objectives, they will be assessed in accordance with the Environment Agency HORIZONTAL GUIDANCE NOTE IPPC H1: "Environmental Assessment and Appraisal of BAT" MODULE 3 Quantify Impacts – ISBN 011 3101082.

- Port Talbot Peripheral Distributor Road (PDR) relief road providing a bypass of the A48.
- Ongoing regulation of NPTCBC and Natural Resources Wales permitted industrial activities by respective organisations.
- Transport planning through the development control process.
- School travel planning.
- Discouraging bonfires through education and diversion of green waste for composting.
- Monthly street sweeping in Taibach Margam.
- Air alerts to the public.

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

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[3]. NPTCBC is committed to reducing the exposure of people in NPTCBC to poor air quality in order to improve health.

We have developed actions that can be considered under nine broad topics:

- Alternatives to private vehicle use
- Environmental permits
- Policy guidance and development control

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

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

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

- Promoting low emission plants
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management

Our priorities are:

- Priority 1 - Improve overall air quality across the borough
- Priority 2 - Through collaborative working, ensure that wider strategic air quality action is implemented through existing policy areas
- Priority 3 - Developing partnerships and public education
- Priority 4 - Assess and manage $PM_{2.5}$ exposure

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

Responsibilities and Commitment

This AQAP was prepared by the Planning and Public Protection of NPTCBC with the support and agreement of the following officers and departments:

- Celvin Davies, General Environmental Health Manager, Planning and Public Protection
- Gareth Liley, Environmental Health Team Leader, Planning and Public Protection
- Leah Morgan, Senior Environmental Health Officer, Planning and Public Protection

- Michael Roosmalen, Pollution Control Officer, Planning and Public Protection
- David Morris, Planning Policy Officer
- Chris Davies, Development Manager Planning
- Laura Pack, Active Travel
- Steve Owen, Highways
- Daniel Rees, Lighting and Buildings Services Manager
- Rebecca Sharp, Planning Policy - Countryside

On behalf of Neath Port Talbot County Borough Council, this AQAP has been approved by:_____Signature

_____Name

Job Title

On behalf of Swansea Bay University Health Board, this AQAP has been signed off by:

_____Signature

_____Name

_____Job Title

This AQAP will be subject to an annual review, appraisal of progress and an update report provided to Neath Port Talbot County Borough Council's Cabinet Committee. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Neath Port Talbot County Borough Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Leah Morgan at:

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1 Introduction

This report outlines the actions that Neath Port Talbot County Borough Council (NPTCBC) will deliver between 2024-2029 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to Neath Port Talbot.

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

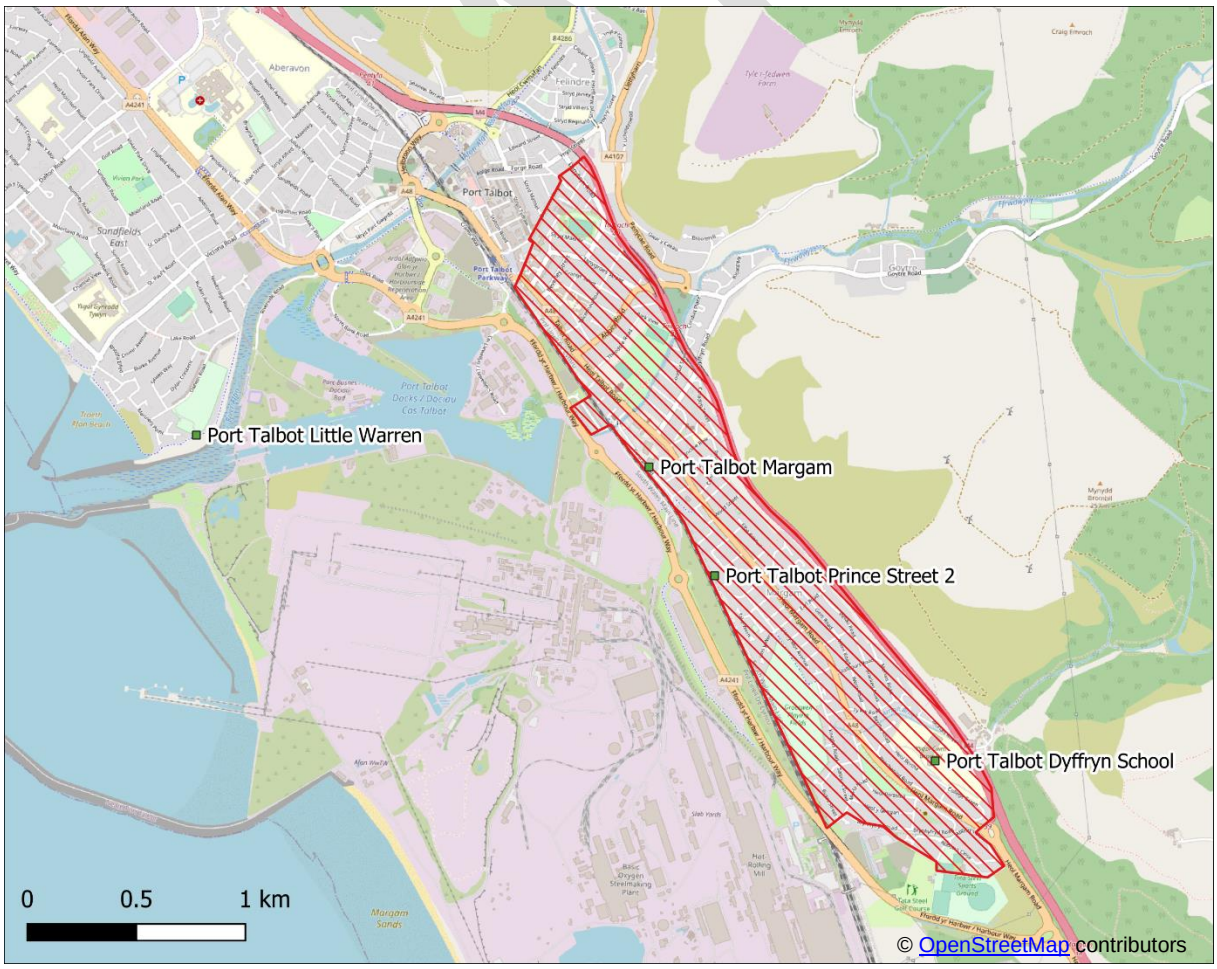
This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within NPTCBC's air quality annual progress reports (APR).

2 Summary of Current Air Quality in Neath Port Talbot

2.1 Overview of PM_{10} in Neath Port Talbot

Neath Port Talbot declared an Air Quality Management Area (AQMA) for exceedance of the 24-hour mean Air Quality Objective (AQO) for PM_{10} on 1st July 2000. The AQO limit is for no more than 35 exceedances of a 24-hour mean PM_{10} concentration of 50 µg/m^3 in a calendar year. Taibach Margam AQMA encompasses an area of land and properties between then Corus Steel, now Tata Steel, and the M4 Motorway, as shown in Figure 2-1.

Figure 2-1 Map of the Taibach Margam AQMA and PM_{10} automatic monitoring stations



The trend since declaration of the Taibach Margam AQMA in 2000 is towards lower pollution levels, and there have been no breaches of the AQO for daily mean PM_{10} since 2015 to 2022, however in 2023, Prince Street 2 did exceed the daily mean PM_{10} AQO. The status of the AQMA will continue to be kept under review by NPTCBC and Welsh Government given the recent exceedance. Overall, it is considered important that the AQMA remains in place for the following reasons:

- To allow for a period of post Covid air quality monitoring, to establish any impact that Covid had on the pollution levels and to see if long term changes in working practices has an impact on the AQMA.
- A period of monitoring to allow investigation into the impact that the reduced M4 speed limit has had on the AQMA.
- Completion of the Vortex Air Quality Monitoring Pilot Study that aims to more effectively target interventions, identify particular pollution hotspots and sources that were previously hidden, and gain a better understanding of the impact of particular policies; crucial to designing effective strategies for managing air pollution. Further information is available on our website at https://www.npt.gov.uk/28695.
- Considerations of any new requirements imposed by the Clean Air Bill which is scheduled for introduction during the second year of this Senedd term[4].
- Noted increases in days exceeding the daily PM_{10} concentration limit at PT2 Margam monitoring site in 2021 and 2022 which has now exceeded the daily mean AQO in 2023.

The identification of a new exceedance at the Prince Street monitor would ordinarily have triggered a Detailed Assessment to establish the boundary of an AQMA. However, Prince Street is located within the current AQMA in the Taibach Margam area (see Figure 2-1) which was declared in July 2000. The Council has given consideration to whether or not the boundary should be amended, however, for the following reasons it is not considered necessary;

[4] https://www.gov.wales/written-statement-publication-white-paper-clean-air-wales-bill-summary-responses

- The exceedance falls within the existing AQMA
- The source of the exceedance remains the same, i.e., the Steelworks
- Nearby monitors closer to the AQMA boundary are not exceeding the AQO
- The boundary encompasses all sensitive receptors in the area
- Any mitigation for the exceedance will be provided by this AQAP

It is unlikely that the AQMA would be considered for revocation in the near future unless it meets the daily mean PM_{10} AQO for at least three years.

2.2 PM_{10} monitoring results for 2018-2022

Table 2-1 and Table 2-2 present PM_{10} monitoring results at the five industrial sites for the last six years, for the 24-hour and annual mean respectively. Whilst the AQO was not exceeded from 2018 through to 2022, Prince Street 2 did exceed the daily mean AQO in 2023; the daily mean PM_{10} concentrations were exceeded on 46 days, 11 days more than is allowed by the AQO.

Table 2-1 24-Hour Mean PM_{10} Monitoring Results 2018-2023, Number of PM_{10} 24-Hour Means > 50 µg/m^3

Site ID	Site Name	2018	2019	2020	2021	2022	2023
PT2	Margam	11	12	11	33	23	32
DS1	Dyffryn School	-	2	0	0 (22)	2 (30)	3
LW1	Little Warren	9	9	15	7	6 (33)	11
PS2	Prince Street 2	12	8	16	3 (40)	20 (47)	46
TW1*	Twll-yn-y-Wal Park	9	10	7	0 (39)	-	-

For years with invalid data capture (less than 85%). The 90.4th percentile has been provided in brackets ().

*This site stopped monitoring in March 2021.

Red – exceeds the daily mean PM_{10} AQO

Table 2-2 Annual Mean PM_{10} (µg/m^3) and Data Capture % Monitoring Results 2018-2023

Site ID	Site Name	2018	2019	2020	2021	2022	2023
PT2	Margam	23 (96%)	21 (95%)	21 (95%)	25 (92%)	26 (94%)	27 (93%)
DS1	Dyffryn School	-	22 (74%)	23 (67%)	25 (5%)	17** (60%)	19 (95%)
LW1	Little Warren	21 (85%)	20 (89%)	21 (98%)	18 (91%)	27** (63%)	21 (98%)
PS2	Prince Street 2	23 (93%)	20 (89%)	24 (83%)	20 (53%)	19** (75%)	29 (99%)
TW1*	Twll-yn-y-Wal Park	21 (99%)	21 (96%)	20 (91%)	20 (21%)	-	-

All means have been "annualised" as per LAQM.TG16 if valid data capture for the full calendar year is less than 75%.

*This site stopped monitoring in March 2021.

**Years with invalid data capture (less than 75%) have not yet been annualised for 2022

2.3 Overview of additional air quality issues in Neath Port Talbot

This AQAP is predominantly focused on the pollutant for which the Air Quality Management Area (AQMA) has been declared – for daily mean PM_{10}. However, Neath Port Talbot would like to move away from concentrating solely on targets and work towards continual improvement of air quality in throughout the borough.

There are additional pollutants which are of concern in Neath Port Talbot, however, these do not fall under LAQM. They are: PAHs (in particular Benzo[a]Pyrene) and Nickel, responsibility for meeting air quality limit values is devolved to the national administrations and therefore is the responsibility of WG, however, NPT work closely with them and other partner agencies to achieve this.

Large particulates/nuisance dust is an issue in Neath Port Talbot, there are no official objective or limits for this but Neath Port Talbot work with partner agencies, businesses and other interested parties to address the sources of dust.

New limits for $PM_{2.5}$ are expected soon and Neath Port Talbot are starting proactive work including measures within this plan to monitor and address $PM_{2.5}$ including the installation of 3 new $PM_{2.5}$ monitoring sites in 2022. These additional pollutants of concern are all constituents of Particulate Matter (PM). Many of the measures in this AQAP designed to target PM may have a positive impact on reducing these additional pollutants of concern, however the actions do not specifically target these additional pollutants.

Large particulates (nuisance dust) fallout in Port Talbot

Nuisance dust remains an important issue of concern to residents in Port Talbot, and there are a number of potential sources which include activities at the steel works.

Nuisance dust is monitored by NPTCBC via deposit gauges, at the same locations as the automatic PM_{10} monitoring. There is no statutory nuisance dust limit however a value of 200 mg/m^2 of dust per day is recommended as the threshold for nuisance by the Institute of Air Quality Management (IAQM). However, it should be noted that the public perception of what constitutes a nuisance might suggest a lower limit would be more appropriate. The Minerals Technical Advice note[5] from Welsh Government suggests a limit of 80 mg/m^2 per day for coal working. NPTCBC uses the following nuisance dust fallout categories to monitor the nuisance dust situation:

[5] https://www.npt.gov.uk/media/15338/npt-aq-progress-report-2020.pdf?v=20210309102532

Table 2-3 Nuisance dust fallout categories used by NPTCBC

Fallout rate mg/m^2/day	Category
< 40	Low
40 to 79	Moderate
80 to 159	High
> 159	Very high

During 2022 the maximum deposition rate at three sites (Prince Street, Little Warren and Port Talbot Fire Station) exceeded the IAQM nuisance limit of 200 mg/m^2 of dust per day w. The average deposition rates for all sites were below the IAQM nuisance limit of 200 mg/m^2 of dust per day.

The Minerals Technical Advice Limit of 80 mg/m^2/day was exceeded at four out of six sites (Dyffryn Upper School, Little Warren, Port Talbot Fire Station and Prince St Margam) for the maximum deposition rate.

Table 2-4 Summary of Dust Deposition Results (in 2022)

Site	Maximum Deposition (mg/m^2/day)	Average Deposition (mg/m^2/day)
Prince St, Port Talbot	**201**	103.5
Tairwaith Community Hall	127	45.5
Little Warren, Port Talbot	**270**	48.7
Wembley Avenue, Onllwyn	190	53.8
Dyffryn Upper School, Bertha Road, Port Talbot	188	72.7
Port Talbot Fire Station	**508**	88.7

Bold – exceeds the IAQM nuisance limit.

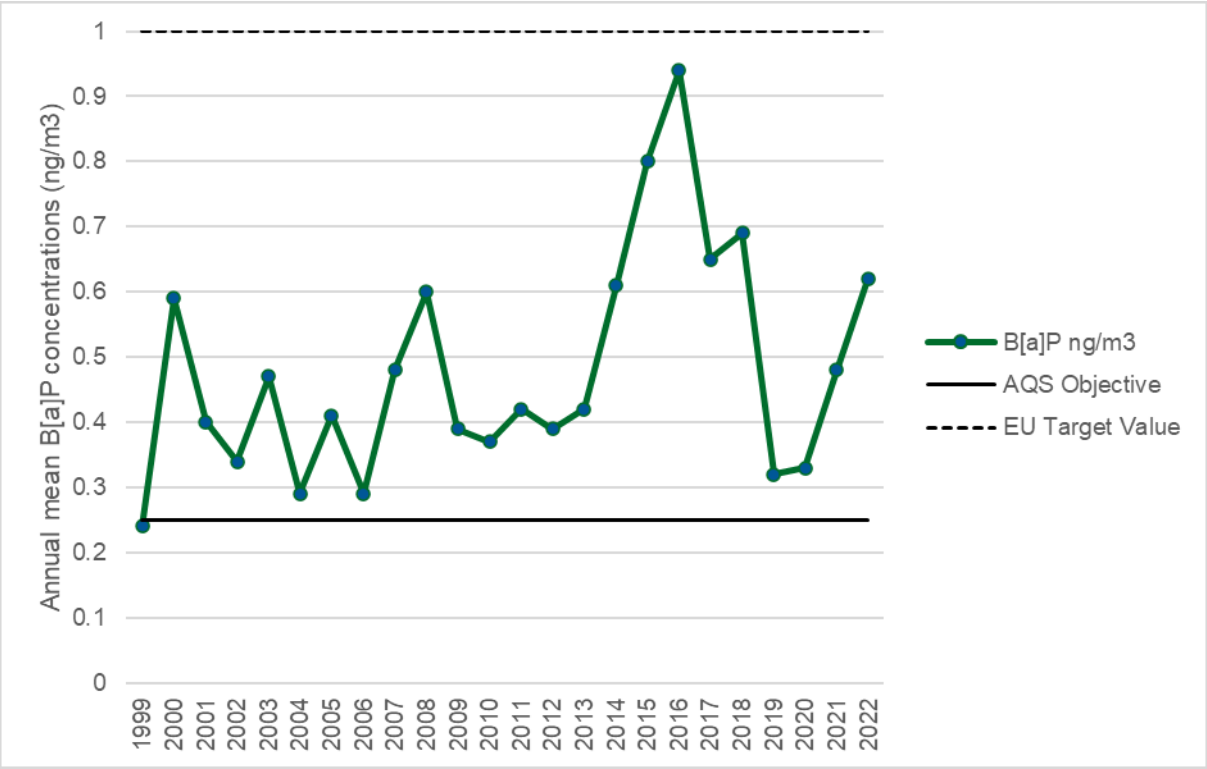
Polyaromatic hydrocarbons (PAH) in Port Talbot

PAHs comprise a large group of compounds consisting of hydrocarbons containing two or more benzene rings fused together or to other hydrocarbon rings. They are formed during the combustion of fuels such as coal and oil at high temperatures.

PAHs typically occur in complex mixtures and not as individual compounds. They are present in the atmosphere as a component of airborne particulate matter (PM).

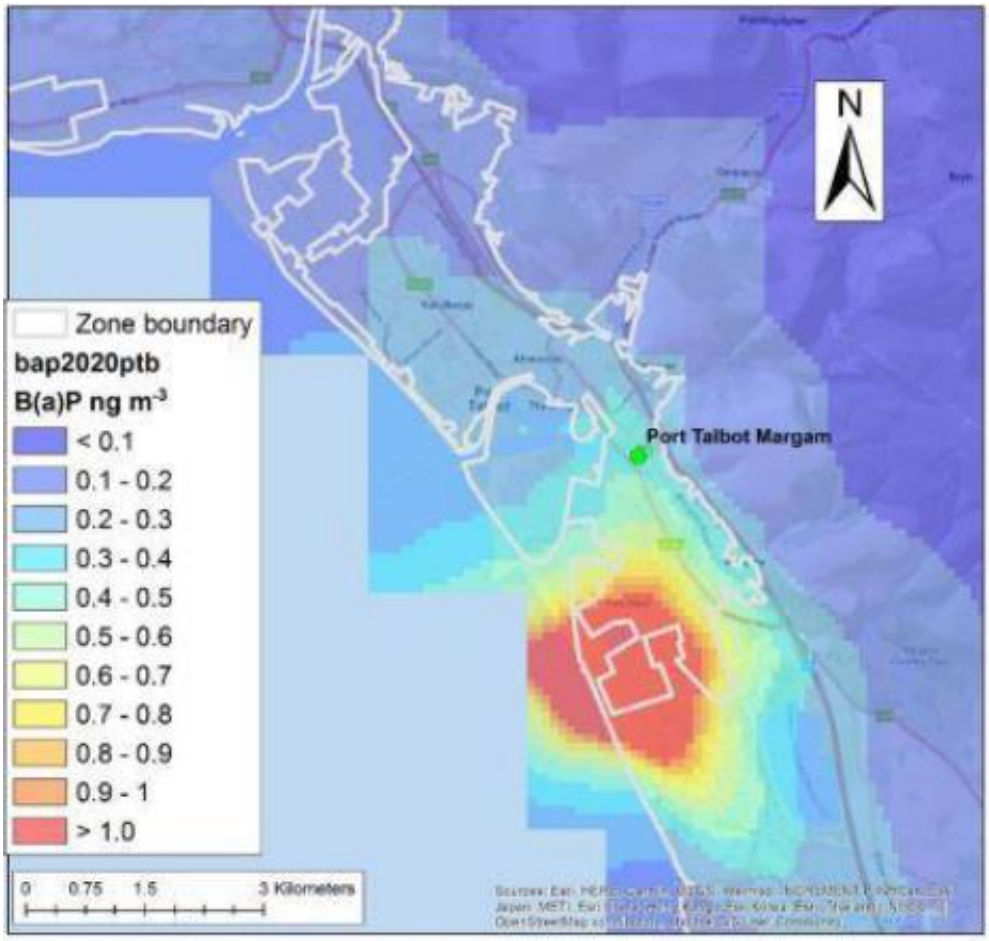
One specific PAH of concern: Benzo[a]Pyrene (**BaP**) is non-compliant with the National Air Quality Objective of 0.25 ng/m^3. The long-term trend is increasing and the 2021 result almost tripled compared with the 2020 concentration.

Figure 2-2 Benzo[a]pyrene Annual Averages 1991-2022



This is also an issue which is related to activities at the Port Talbot steel works e.g. coke ovens. More on this can be found in the technical report on UK supplementary modelling assessment under the Air Quality Standards Regulations 2010 for 2020. The regulator (NRW) is working with Tata in order to address this issue.

Figure 2-3 Modelled Total Annual Mean B[a]P Concentrations in the Vicinity of the Coke Ovens at the Port Talbot Steelworks in 2020



Contains Ordnance Survey data © Crown copyright and database right [2022]

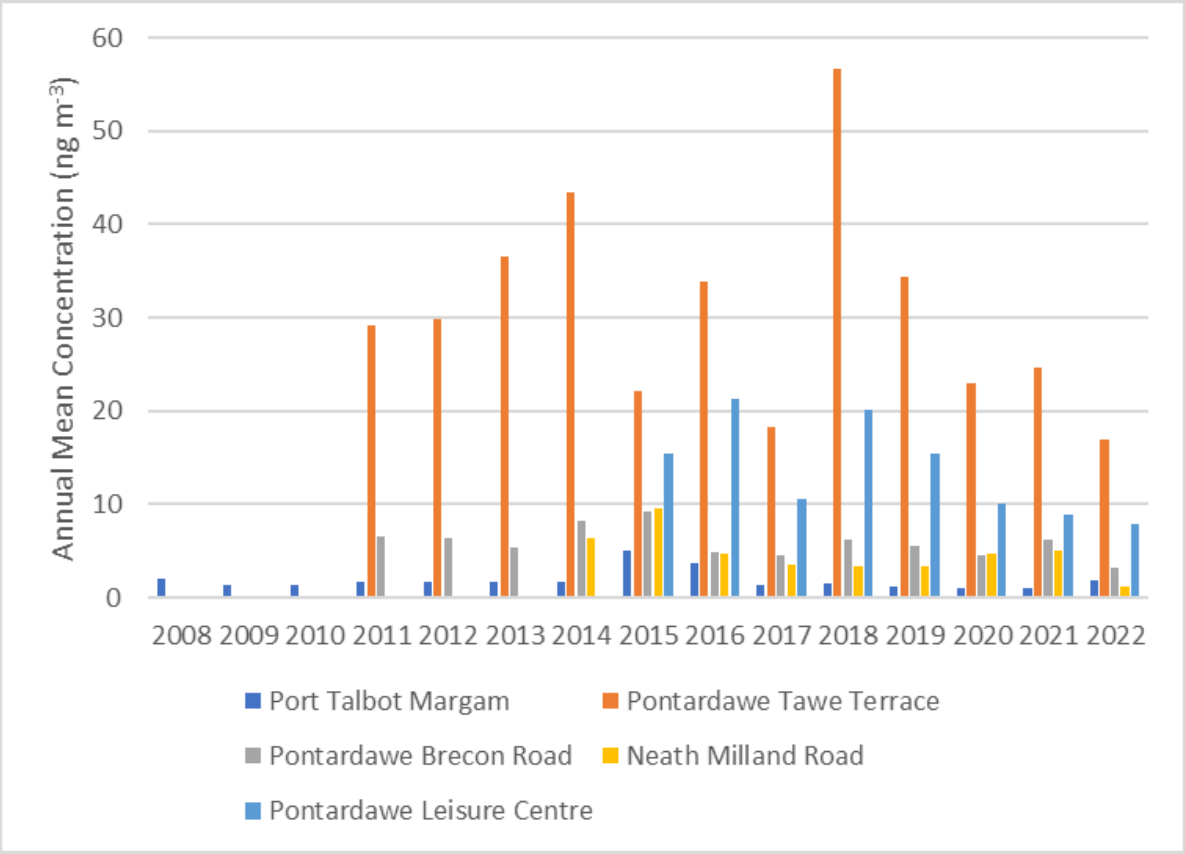
Nickel in Pontardawe

Nickel is a heavy metal which is present in the atmosphere as a component of airborne particulate matter (PM). The main source of raised nickel levels in Pontardawe is the Wall Colmonoy works, which is regulated by the Council. 2021 was not compliant and has increased compared to 2020.

The target value for the total nickel content in the PM_{10} fraction averaged over a calendar year in ambient air is 20 ng/m^3. The average concentration of nickel in 2022 was 18.6 ng m^{-3} which is 93% of the Target value. This is a decrease from 2021 (24.4 ng m^{-3}). The maximum weekly concentration observed was 75.3 ng/m^3 . Information received from Wall Colmonoy confirmed there were fan changes in the Atomising Dry extraction system which caused a release of fugitive emissions from

the ductwork that coincided with an exceedance of the target value in November 2021. Emissions reported for the Vale refinery were stable throughout the year, showing no clear correlation with ambient nickel concentrations.

Figure 2-4 Trend in Annual Mean Concentrations of Nickel 2008 - 2022



$PM_{2.5}$

Monitoring of $PM_{2.5}$ in Neath Port Talbot demonstrates that this pollutant is well under the UK and EU annual mean target of 25 µg/m^3. However, NPTCBC consider it important to keep $PM_{2.5}$ under close review as new targets were introduced for $PM_{2.5}$ in England in December 2022[6], and the 2023 Environment (Air Quality and Soundscapes) (Wales) Act contains a requirement for Ministers to set a new $PM_{2.5}$

[6] https://www.legislation.gov.uk/ukdsi/2022/9780348242959#:~:text=The%20annual%20mean%20concentration%20target%20is%20that%20by%20the%20end,%E2%80%9Cthe%20target%20level%E2%80%9D).

target for Wales. NPT introduced 3 new $PM_{2.5}$ monitors in 2022 and await further details on the requirement of the Act.

Please refer to the latest Annual Progress Report (APR) from NPTCBC.

3 NPTCBC's Air Quality Priorities

3.1 Public Health Context

Poor air quality represents the largest environmental risk to public health. 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.[7]

Public Health Wales estimates the burden of long-term air pollution exposure to be the equivalent of 1,000 to 1,400 deaths (at typical ages) each year.[8] In Wales, air pollution costs £1 billion every year from health service costs and lost work days. [9]

As outlined in section 2, this AQAP predominantly focuses on PM_{10}. PM is a generic term used to describe a complex mixture of solid and liquid particles of varying size, shape, and composition. Some particles are emitted directly (primary PM); others are formed in the atmosphere through complex chemical reactions (secondary PM). The composition of PM varies greatly and depends on many factors, such as geographical location, emission sources and weather. The main sources of man-made PM are the combustion of fuels (by vehicles, industry and domestic properties) and other physical processes such as tyre and brake wear. Natural sources include wind-blown soil and dust, sea spray particles, and fires involving burning vegetation (see Figure 3-1).

PM is often classified according by aerodynamic size and referred to as:

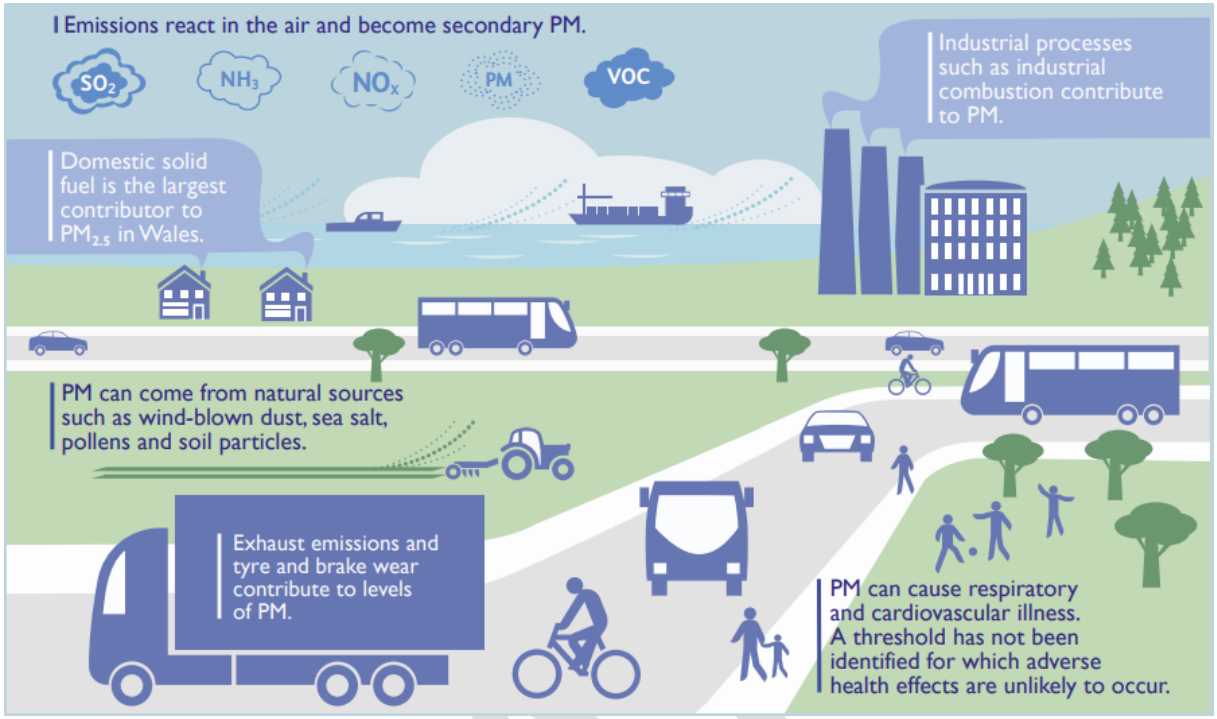
- coarse particles (PM_{10}; particles that are less than 10 microns (µm) in diameter)
- fine particles ($PM_{2.5}$; particles that are less than 2.5 µm in diameter)
- ultrafine particles ($PM_{0.1}$; particles that are less than 0.1 µm in diameter)

[7] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

[8] https://phw.nhs.wales/services-and-teams/environmental-public-health/air-quality/air-pollution-and-health-fact-sheet/

[9] https://phw.nhs.wales/services-and-teams/environmental-public-health/air-quality/reducing-health-risks-associated-with-road-traffic-air-pollution-in-wales-pdf/

Figure 3-1 Sources and effects of particulate matter (PM), The Clean Air Plan for Wales[10]



The size of particles and the duration of exposure are key determinants of potential adverse health effects. Particles larger than 10 µm are mainly deposited in the nose or throat, whereas particles smaller than 10 µm pose the greatest risk because they can be drawn deeper into the lung. The strongest evidence for effects on health is associated with fine particles ($PM_{2.5}$).

There is an extensive body of evidence that long-term exposure to PM increases mortality and morbidity from cardiovascular and respiratory diseases. Outdoor air pollution, particularly PM, has also been classified by the International Agency for Research on Cancer (IARC) as carcinogenic to humans (a Group 1 carcinogen) and causing lung cancer. There is some experimental evidence, however, that ultrafine particles may also pass through the lungs into the bloodstream.

Though air pollution can be harmful to anyone, some people are more affected as a result of where they live, the concentration of air pollution they are exposed to in their

[10] https://www.gov.wales/sites/default/files/publications/2020-08/clean-air-plan-for-wales-healthy-air-healthy-wales.pdf

day-to-day lives, or their inherent susceptibility to health problems caused by air pollution. Those who are more susceptible include older people, children, those with pre-existing cardiovascular or respiratory disease, pregnant women, communities in areas of deprivation, higher pollution and low-income communities.

Generally, more air pollution sources and higher pollutant concentrations are found in more socially disadvantaged areas, consequently air pollution tends to cause most harm to people in socially deprived groups[11]. For those on low incomes problems are compounded as they are more likely to have existing medical conditions, they are more likely to live in areas with poorer outdoor and indoor environments and have less access to jobs, healthy food, decent housing and green spaces, which all contribute to poorer health[12] .

It is important to consider how vulnerability to pollution impacts is unevenly experienced by different groups in society, where possible action needs to be focussed on pollution/deprivation hotspots. This will help to reduce scenarios where air pollution is exacerbating the existing health disparities associated with deprivation and will provide a focus for the most effective actions in terms of improving public health. It is important to also consider when implementing measures to improve air quality whether they could put disadvantaged communities at further disadvantage, either economically or because generalised air quality improvements can mask pockets of deteriorating air quality, for example through displacement activity.

3.2 Planning and Policy Context

3.2.1 National Context

The Environment Act 1995 and subsequent updates within the Environment Act 2021 gives local authorities responsibilities and duties for air quality at a local level. This includes the responsibility to review and assess key pollutants. The Local Air Quality

[11] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/690846/CMO_Annual_Report_2017_Health_Impacts_of_All_Pollution_what_do_we_know.pdf

[12] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

Management (LAQM) framework requires local authorities to annually review and assess air quality. It is a statutory duty of the County Borough Council to declare an Air Quality Management Area (AQMA) where exceedances of the air quality objectives are identified. The County Borough Council is then required to produce an AQAP to address the air quality within the area to reduce pollutant concentrations.

The Clean Air Plan for Wales[13] sets out Welsh Government's commitment and long-term ambition to improve air quality, and the steps it will take to deliver this. The Clean Air Plan brings together work across many Government departments and public bodies to take air pollutants from many sources, and will serve as a living document to secure clean air for current and future generations. It includes ambitions to meet and where possible exceed requirements set down in UK and international guidance and legislation. One of the key areas highlighted by the Clean Air Plan is the continued risk of exceedance of European ambient air limit PM_{10} in Port Talbot.

Public bodies in Wales need to carry out air quality and noise management in accordance with the five ways of working set out in the Well-being of Future Generations (Wales) Act 2015 ("the WFG Act"). These are:

- looking to the long term so we do not compromise the ability of future generations to meet their own needs;
- taking an integrated approach;
- involving a diversity of the population in the decisions affecting them;
- working with others in a collaborative way to find shared sustainable solutions; and
- acting to prevent problems from occurring or getting worse.

This means policy integration and collaboration with partners is required beyond the scope of Local Authorities' functions under the Environment Act. The Welsh Government has also made population exposure to air pollution one of the national indicators under the WFG Act.

[13] https://www.gov.wales/clean-air-plan-wales-healthy-air-healthy-wales

A Clean Air Act for Wales is a key commitment in the Clean Air Plan for Wales. A Clean Air Bill for Wales is scheduled to be introduced in year 2 of the Senedd term. In February 2023, a White Paper consultation on the Clean Air Bill for Wales[14] was published.

The Environment (Air Quality and Soundscapes) (Wales) Bill 2023[15] has been proposed, with the overarching aim to bring forward measures that will contribute to improvements in the quality of the air environment in Wales and reduce the impacts of air pollution on human health, biodiversity, the natural environment and our economy. It proposes to:

- to provide a framework for setting national air quality targets;
- to amend existing legislation relating to the national air quality strategy; local air quality management; smoke control; clean air zones/low emission zones and vehicle idling;
- to place a duty on Welsh Ministers to promote awareness of air pollution; and
- to place a duty on Welsh Ministers to publish a national soundscape strategy.

The Bill is currently at Stage 1 consideration of the general principles of the Bill by a committee, and the agreement of those general principles by the Senedd. Further information about the bill can be found in the Explanatory Memorandum[16].

3.2.1.1 Clean Air for Port Talbot: Short Term Action Plan[17]

The Welsh Government (WG) are currently in the process of updating the Short Term Action Plan (STAP) 2012, a plan which describes the short term actions, over and above the day to day existing activities, that will be taken where there is a risk of exceedance of the PM_{10} daily AQO. This plan is pursuant to the requirements

[14] https://www.gov.wales/sites/default/files/consultations/2023-02/summary-responses-white-paper-consultation-clean-air-bill.pdf

[15] https://senedd.wales/media/raap2wmh/pri-ld15738-e.pdf

[16] https://senedd.wales/media/gbhlcgfn/pri-ld15738-em-e.pdf

[17] https://www.gov.wales/clean-air-port-talbot-short-term-action-plan-2012

imposed on the Welsh Ministers by regulation 11 of the Air Quality Standards (Wales) Regulations 2007.

The STAP is implemented through a collaborative approach, including:

- Steering Group, meeting three times a year, with the purpose of reviewing ongoing work and directing resources appropriately.
- Regulators Group, meeting three times a year, tasked with reviewing the actions being taken by the regulators and Welsh Government in Port Talbot.
- Data Team, meeting monthly, tasked with reviewing the data on PM_{10} and improving the management and interpretation of the data across the different organisations.

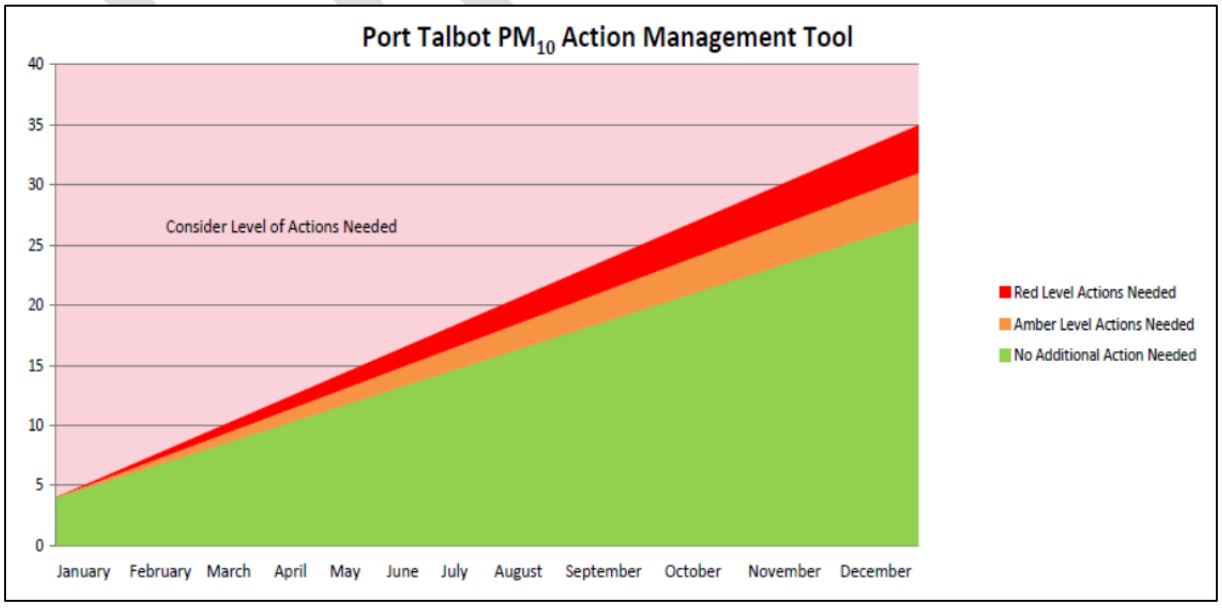
The terms of reference for the groups have been drawn up with input from the Environment Agency Wales (now part of Natural Resources Wales), NPTCBC, Harsco, Tarmac and Tata Steel UK.

The appropriate intervention time for these actions is decided following a model, developed by the Environment Agency Wales (now part of Natural Resources Wales) Technical Specialist and based on historical data trends. The model compares the number of breach days relative to the current position within the calendar year, and indicates whether the number of breach days is disproportionately high. For example, a total of 20 breaches within the first six months of a year would be of great concern, and would trigger more stringent interventions, than reaching a total of 20 breaches by December.

Figure 3-2 Escalation model for STAP action – four indicators of required actions

- Green – the number of breaches is low for the current point in the year and the existing wide ranging control measures are effectively minimising PM_{10} emissions.
- Amber – the number of breaches is approaching a high level relative to the current point in the year, therefore, additional interventions would be initiated and preparations would be made by the relevant organisations to minimise the risk of reaching the red area.
- Red – the current rate of breaches has the potential to reach 35 by the end of the calendar year, therefore the Welsh Government would call a meeting of the relevant organisations to consider the initiation of the Short Term Actions. These Short Term Actions are designed to have an immediate effect to improve air quality.
- Pink – if at any point during the year the rate of breaches has the potential to exceed 35, consideration will be given to what additional measures should be initiated.

Figure 3-3 Escalation model for STAP action – Action Management Tool, calendar months against number of year to data exceedances of the 50 µg/m^3 daily limit for PM_{10}



3.2.2 Local Context

3.2.2.1 Air Quality Strategy, "Air Wise - clean air for everyone"[18]

Neath Port Talbot's Local Air Quality Strategy, "Air Wise - clean air for everyone", sets out the Council's strategic policy for achieving cleaner air in partnership with the whole community. It also links in with the Council's aims and values and in particular with those relating to " Sustainable Communities and Environment" and "Prosperity for All," which includes improving air quality and regenerating the area's physical and industrial environment. Originally developed in 2000 the strategy was most recently reviewed and updated in November 2013. The Council will consider whether or not this document should be reviewed when guidance relating to the new Environment (Air Quality and Soundscapes) (Wales) Act 2024 is published as it may change responsibilities on the Council in relation to Air Quality.

3.2.2.2 Local Development Plan[19]

NPT adopted the Local Development Plan (LDP) on 27th January 2016. It is currently being updated – see the Replacement Local Development Plan 2023-2038[20].

The policies listed below are relevant to air quality:

- Strategic Policy SP2 – Health;
- Strategic Policy SP16 – Environmental Protection;
- Policy EN8 – Pollution and Land Stability; and
- Policy EN9 – Developments in the Central Port Talbot Area.

[18] https://beta.npt.gov.uk/environmental-health/air-land-and-water-quality/npt-air-quality-strategy/

[19] https://www.npt.gov.uk/7328

[20] https://www.npt.gov.uk/29462

Within the Review of the Local Development Plan[21] in July 2020, 18 key issues were identified, including air quality. The Review discusses the possibility of dividing Policy EN8 in the Replacement Local Development Plan, to provide separate policies for pollution and land stability, referring to areas having historic land stability issues.

3.2.2.3 Pollution Supplementing Planning Guidance (SPG) October 2016[22]

The 'Pollution' SPG provides detailed information about pollution issues in NPT and sets out the relevant matters that will need to be taken into consideration when developments are being planned. While only policies in the LDP have special status in the determination of planning applications, the SPG will be taken into account as a material consideration in the decision-making process.

3.2.2.4 Environment Strategy 2008-2026[23]

The Neath Port Talbot Environment Strategy was developed in partnership with the Neath Port Talbot Environment Forum.

Overarching objectives of the Strategy which directly or indirectly relate to air quality are:

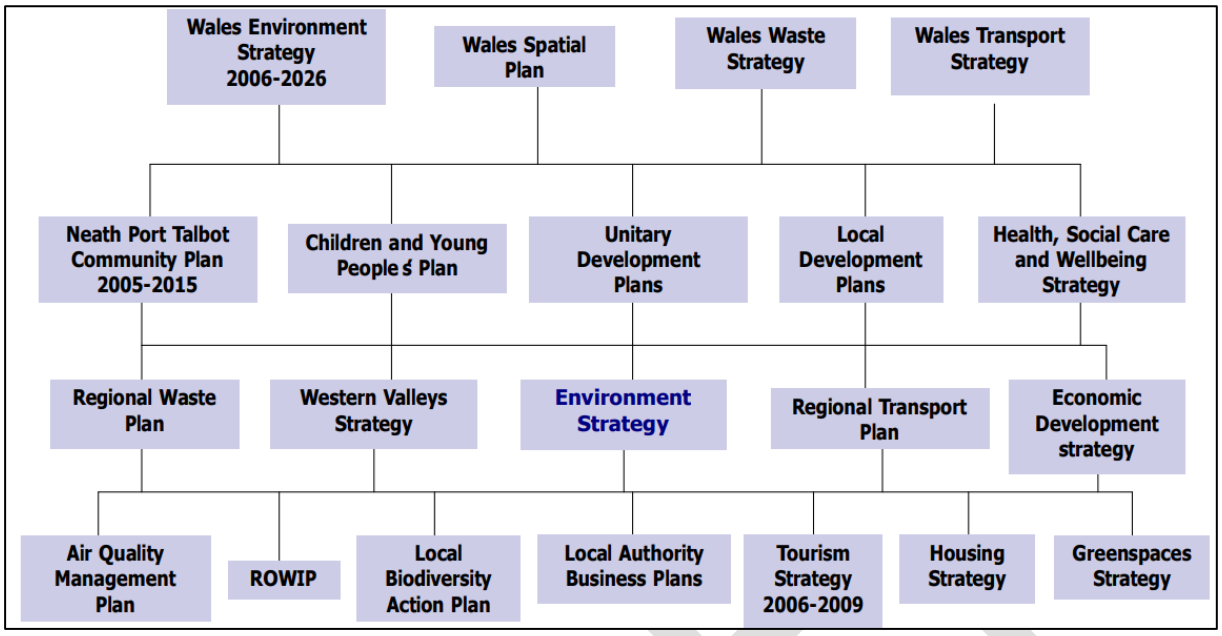
- Minimise pollution
- Monitor and regulate impacts
- Adapt to climate change
- Increase energy and resource efficiency.

[21] https://www.npt.gov.uk/media/13823/ldp-review-report-july-2020.pdf?v=20200709084011

[22] https://www.npt.gov.uk/media/7468/spg_pollution_oct16.pdf

[23] https://www.npt.gov.uk/1518

Figure 3-4 Appendix 2 of the Environment Strategy 2008:2026, demonstrating how it relates to other strategies and documents



3.2.2.5 Industrial Pollution Control[24]

The Council has the responsibility for regulating certain industrial activities under the Environmental Permitting Regulations 2016[25] . These regulations specify the types of operation which must apply for a permit. Most permits are "Part B" permits and only regulate emissions to air. But some permits are "A2" and regulate water pollution, land contamination, energy usage and accident prevention, although this tends only to be for a few of the larger industrial sites.

Natural Resources Wales (NRW) regulates the larger or more complex industries, which are known as "A1" installations.

All permitted activities in Neath Port Talbot with the potential to impact on air quality are subject to strict permit conditions regarding the emissions they may release, and must monitor, measure, and report actual emissions to the permitter (NRW or NPTCBC). Permits also require for incidence reporting, response actions to

[24] https://www.npt.gov.uk/1501

[25] https://www.legislation.gov.uk/uksi/2010/675/contents/made

incidents, and for staff members to be trained and informed on both routine and incident response processes regarding air quality and emissions.

In terms of annual measured PM_{10} emissions, the largest permitted emitter is Tata Steel, who have a comprehensive Air Quality Management Plan in place, as well as an ongoing Dust reduction programme in coordination with Natural Resources Wales.

3.2.2.6 Decarbonisation and Renewable Energy (DARE) Strategy (May 2020) [26], [27], [28]

On 30th April 2019, the Welsh Government declared a climate emergency. The announcement drew attention in Wales to the magnitude and significance of the latest evidence on climate change.

The vision of the DARE is "To introduce a series of interventions and improvement measures across the County Borough to maximise the economic, social and environmental benefits and opportunities that the decarbonisation agenda provides."

One of the key objectives is:

- "To reduce energy consumption or where reduction is not possible, to use fuel sources that are less harmful to the environment."

Actions under DARE include upgrading of the council fleet, provision of electric vehicle charging infrastructure, a taxi licensing policy, active travel, creation of a Climate Change Working Group, and preparation of a 2030 Net Zero Action Plan.

These have co-benefits for improving air quality, and air quality is highlighted an important aspect of DARE.

Additionally, there are measures regarding energy efficiency of buildings and Sustainable Biofuels project to utilise waste gases from the Tata plant, which may impact on air quality.

[26] https://www.npt.gov.uk/23524

[27] https://www.npt.gov.uk/media/16358/dare-the-neath-port-talbot-decarbonisation-and-renewable-energy-strategy.pdf?v=20211207133732

[28] https://www.npt.gov.uk/media/13541/dare-strategy-may-20.pdf?v=20200522162830

3.2.2.7 Joint Local Transport Plan 2015-2020[29]

The Regional Transport Plan is the result of joint working between the four local authorities (Carmarthenshire, Neath Port Talbot, Swansea and Pembrokeshire) in south west Wales. Its purpose is to shape transport policy in the region for the period 2015-2020 and beyond, as well as acting as a bidding document for major transport schemes.

3.2.2.8 Green Infrastructure

Green Infrastructure is considered a priority action area for Port Talbot for its many varied and important benefits. One of many benefits of green infrastructure is it's potential to mitigate air quality. Discussions are taking place regarding collaborative projects to pilot Green Infrastructure interventions at air quality hotspots in Neath Port Talbot.

3.3 Source Apportionment

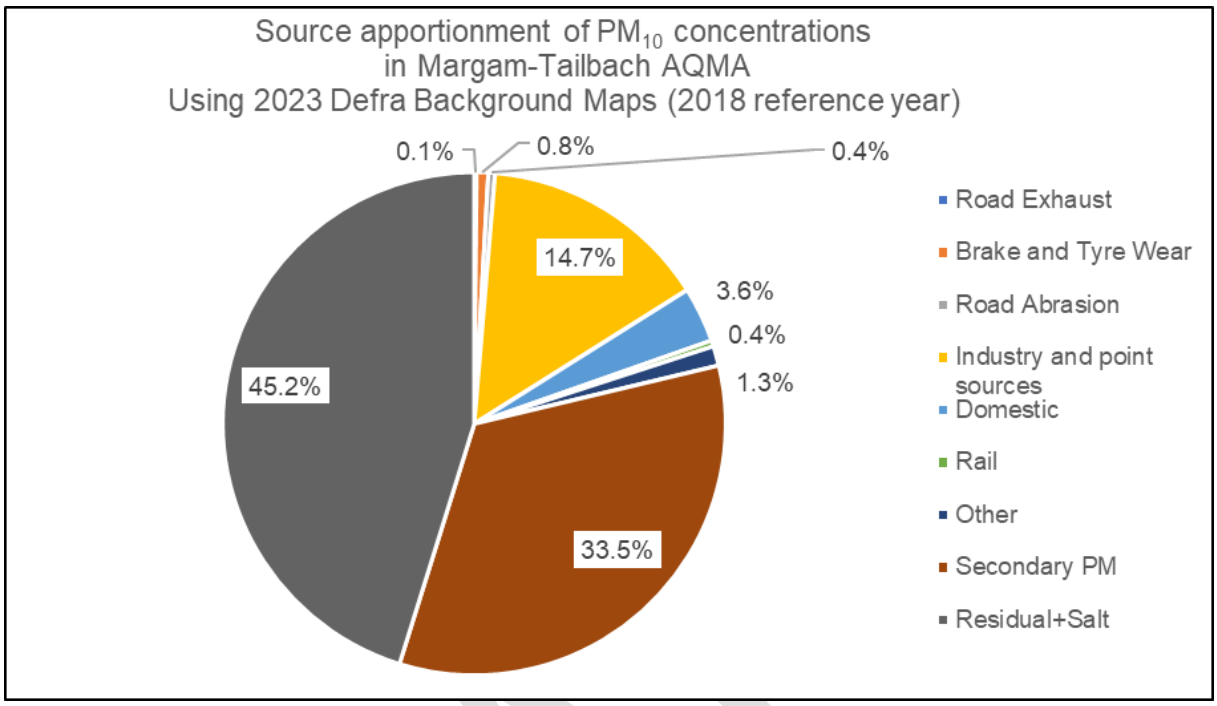
3.3.1 Source apportionment using Defra background maps

A source apportionment exercise was carried out for PM_{10} using Defra background maps for 2023 (based on the reference year 2018) and industrial point source PM_{10} emissions from the National Atmospheric Emissions Inventory (NAEI), for the latest available year (2021).

The Defra background maps provide estimates for pollutant concentrations across the UK at a 1km-by-1km resolution. These are derived from national air quality modelling, also known as pollution climate mapping (PCM), which itself is based on the NAEI. The source apportionment of PM_{10} concentrations in the Taibach Margam AQMA based on the background maps is presented in Figure 3-5.

[29] https://www.npt.gov.uk/1461

Figure 3-5 Source apportionment of PM_{10} in the Neath Port Talbot Taibach Margam AQMA using Defra Background Maps for 2023 (reference year 2018).



"Residual+Salt" includes "PM_ Secondary" includes Sea salt, calcium and iron rich dusts and regional primary PM and residual non-characterised sources (residual is PM with a diameter of less than 1 µg/m^3). "PM_ Secondary" or secondary PM (inorganic and organic), is formed through interaction of other pollutants in the atmosphere. Whilst these source categories comprise the significant majority (79%) of annual PM_{10} concentrations in the AQMA, these sources of PM are outside of NPTCBC's control.

Industry represents the next largest source of annual PM_{10} concentrations in the AQMA (comprising 14.7%), and source apportionment presented in sections 3.3.2 and 3.3.3 point to industry sources as frequently being contributors to sources of peaks in PM_{10} concentrations which result in breaches of the daily PM_{10} concentration limit.

Domestic and road transport related sources also contribute to annual mean PM_{10} concentrations in the AQMA.

3.3.2 NAEI point source emissions data

A breakdown of estimated emissions by industrial point sources in Neath Port Talbot is presented in Table 3-1 and Figure 3-6 . The highest contributor of PM10 emissions is Tata Steel (98.6%) with the highest contribution from the sinter (46%), followed by stockpiles (19%), oxygen furnaces (13%), blast furnaces (10%) and coke ovens (9%). This data has been obtained from the NAEI latest available (2021) list of industrial point sources[30].

In early 2024 Tata Steel announced its plan to transform and restructure Port Talbot Steelworks. Tata's proposals included the closure of the blast furnaces and coke ovens in a phased manner, with the first blast furnace closing around mid-2024 and the remaining heavy end assets winding down during the second half of 2024. The proposal also included the closure of the Continuous Annealing Processing Line (CAPL) in March 2025.

Under the transformation plan, Tata Steel propose to install Electric Arc Furnace technology in Port Talbot which hopes to reduce Tata Steel UK's CO_2 emissions by 5 million tonnes per year equivalent to about 1.5% of UK emissions.

Discussions regarding the proposal continue, however, if the plan proceeds there is no doubt that we will see significant changes in air quality in the area during the timeline of this Air Quality Action Plan, which will be closely monitored and assessed by the Steering Group.

Table 3-1 NAEI point sources in Neath Port Talbot of PM_{10} emissions (in 2021)

Operator	Sector	Plant ID	Site	2021 PM_{10} Emissions (tonnes)	Min. distance from AQMA (km)
Tata Steel Ltd	Iron & steel industries	40537	Port Talbot Sinter	789.85	1.05
		40541	Port Talbot Stockpiles	330.00	1.35
		40539	Port Talbot Oxygen Furnaces	231.13	0.92

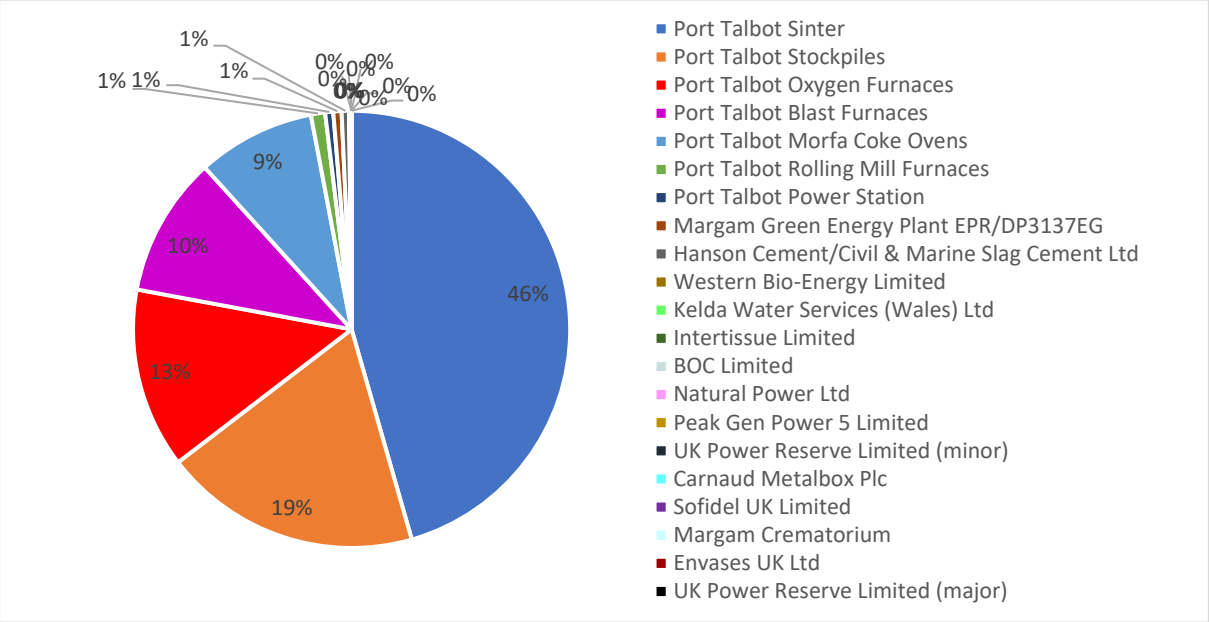
[30] https://naei.beis.gov.uk/data/map-large-source

Operator	Sector	Plant ID	Site	2021 PM_{10} Emissions (tonnes)	Min. distance from AQMA (km)
		40538	Port Talbot Blast Furnaces	179.46	0.61
		40540	Port Talbot Morfa Coke Ovens	151.43	1.71
		40543	Port Talbot Rolling Mill Furnaces	18.23	0.21
		40542	Port Talbot Power Station	10.27	0.34
Margam Green Energy Plant EPR/DP3137 EG	Waste collection, treatment & disposal	9872	Margam Green Energy Plant Land off Longlands Lane, Neath Port Talbot	10.61	0.47
Hanson Cement/Civil & Marine Slag Cement Ltd	Cement	4923	Port Talbot	9.63	0.36
Western Bio-Energy Limited	Minor power producers	12144	Margam	0.47	0.68
Kelda Water Services (Wales) Ltd	Water & sewerage	11839	Afan WWTW	0.99	0.36
Intertissue Limited	Paper, printing & publishing industries	7565	Port Talbot	0.47	4.6
BOC Limited	Chemical industry	12725	Port Talbot	0.30	0.80
Natural Power Ltd	Waste collection, treatment & disposal	6763	Briton Power	0.15	5.87
Peak Gen Power 5 Limited	Minor power producers	14449	Llandarcy*	0.14	7.87
UK Power Reserve Limited	Minor power producers	40535	Afan Way Power Station	0.14	1.17
Carnaud Metalbox Plc	Other industries	3276	Neath*	0.14	7.6
Sofidel UK Limited	Paper, printing & publishing industries	40536	Baglan	0.13	4.43
Margam Crematorium	Miscellaneous	3942	Margam	0.055	0.91
Envases UK Ltd	Other industries	3325	Port Talbot	0.055	2.39

Operator	Sector	Plant ID	Site	2021 PM_{10} Emissions (tonnes)	Min. distance from AQMA (km)
UK Power Reserve Limited	Major power producers	13434	Bridgend*	0.007	7.44

* Not assessed in further detail due to distance from AQMA

Figure 3-6 NAEI source apportionment 2021 (PM_{10})



3.3.3 Previous source apportionment studies undertaken for Neath Port Talbot

It is important to acknowledge the difference in source apportionment of concentrations on different timescales.

Previous source apportionment carried out by Kings College in 2017 included analysis of hourly and daily PM_{10} concentrations measured at the Margam AURN. These are presented in Figure 3-7, grouped by hourly (left) and daily (right) concentration bins.

Figure 3-7 Source apportionment of PM_{10} measured at the Margam AURN monitoring site, from the Kings College 2017 source apportionment study. Source key: grey = traffic, orange = blast furnace, red = iron works, yellow = coke works, purple = BOS plant, blue = marine, green = background, brown = solid fuel burning, black = unexplained.

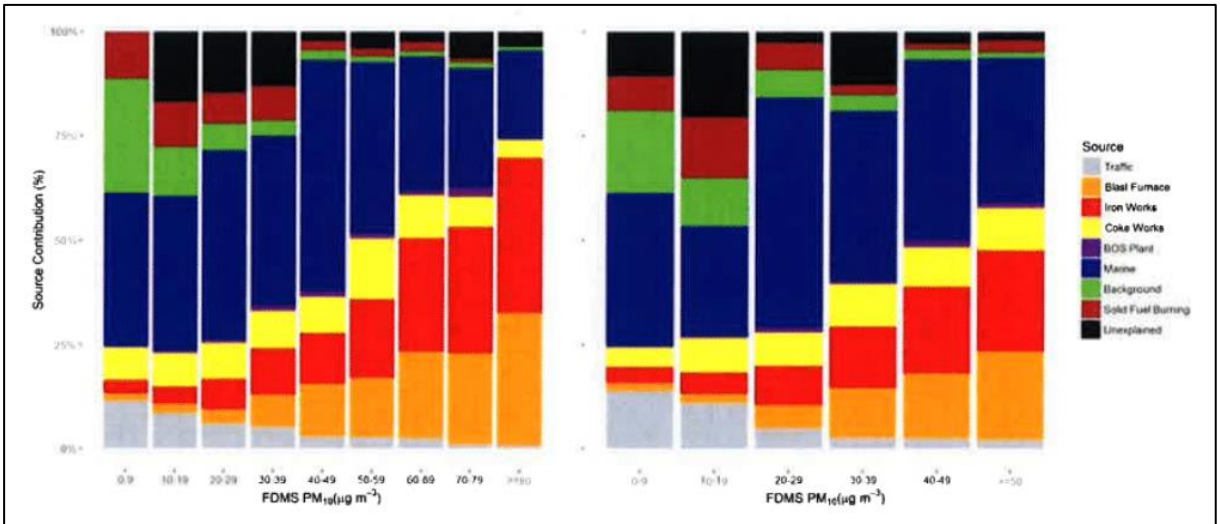


Figure 48: Source data grouped by FDMS PM_{10} mass concentration; hourly (left), daily (right)

The graphs demonstrate that percentage contributions from the blast furnaces and the iron works increase with increased hourly and daily concentrations, and percentage contributions from solid fuel burning and traffic are greater at lower measured hourly and daily concentrations.

Their analysis of contributions of sources of peak PM_{10} events concluded the following key points:

- Higher concentrations of PM_{10} were dominated by either very strong winds from the west (associated with sea salt), or winds from the direction of the Steel complex.
- The largest source of PM_{10} was marine – i.e., sea salt, comprising 33 – 48% of daily PM_{10} mean concentrations. Elemental analysis of PM_{10} has demonstrated chloride to be the main component, with average hourly concentrations of 5.3 µg/m^3 and maximum concentrations up to 20 µg/m^3 under westerly wind conditions.

- The relative contribution of the steel complex increased with concentration to make up 59-73% of PM_{10} during elevated hourly concentrations (>60 µg/m^3) and 57% of the daily mean concentrations greater than the 50 µg/m^3.
- The iron making process with the chief contributor to elevated daily means, 25% from iron works and 22% from the blast furnace), with smaller contributions from the coke works (10%) and BOS plant (1%).
- Solid fuel burning contributed to 7% of PM_{10} concentrations. This source is most dominant at low wind speeds and when wind speed directions are from the adjacent town. There is a strong association with temperature – concentrations from this source being higher in winter months, linked to domestic heating, and diurnal patterns show concentrations from this source increases in the evenings.

3.3.4 Source apportionment using measured concentrations and meteorological data for 2023

Measured concentrations from the Port Talbot Margam (PT4)[31] AURN Measurement site, as well as other WAQN measurement sites, can be used to support the findings from the modelled source apportionment (through Defra Background Maps and previous modelled source apportionment studies).

Data from Port Talbot Margam, Prince Street 2, Dyffryn School and Little Warren were analysed using the openair R package[32]. Measured meteorological data were used for Port Talbot Margam, gap-filled using modelled data from the Weather Research and Forecasting (WRF) model (see Appendix C for further details). For all other sites, WRF modelled meteorological data were employed.

[31] Defra, 2023. Site Information for Port Talbot Margam (UKA00501).

[32] Carslaw, D.C., Ropkins, K., 2012. openair — An R package for air quality data analysis. Environmental Modelling & Software 27–28, 52–61. https://doi.org/10.1016/j.envsoft.2011.09.008

Analysis centred around “bivariate polar plots” to effectively illustrate the relationship between wind speed, wind direction and pollutant concentrations by plotting all three on a polar surface.

Figure 3-8 shows a bivariate polar plot of hourly PM_{10} concentrations at the Margam AURN site in 2023. The highest concentrations highlighted in dark red, are exclusively found when wind is blowing from the South South West at all moderate-to-high wind speeds, from just over 5 m s^{-1} to 15 m s^{-1}.

Figure 3-8 A bivariate polar plot showing the relationship between PM_{10}, wind speed and wind direction.

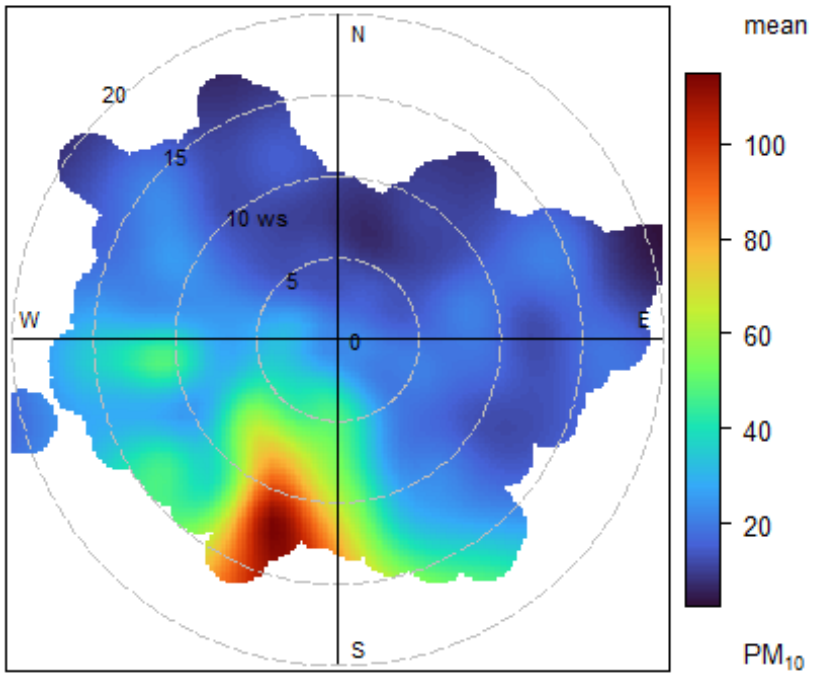
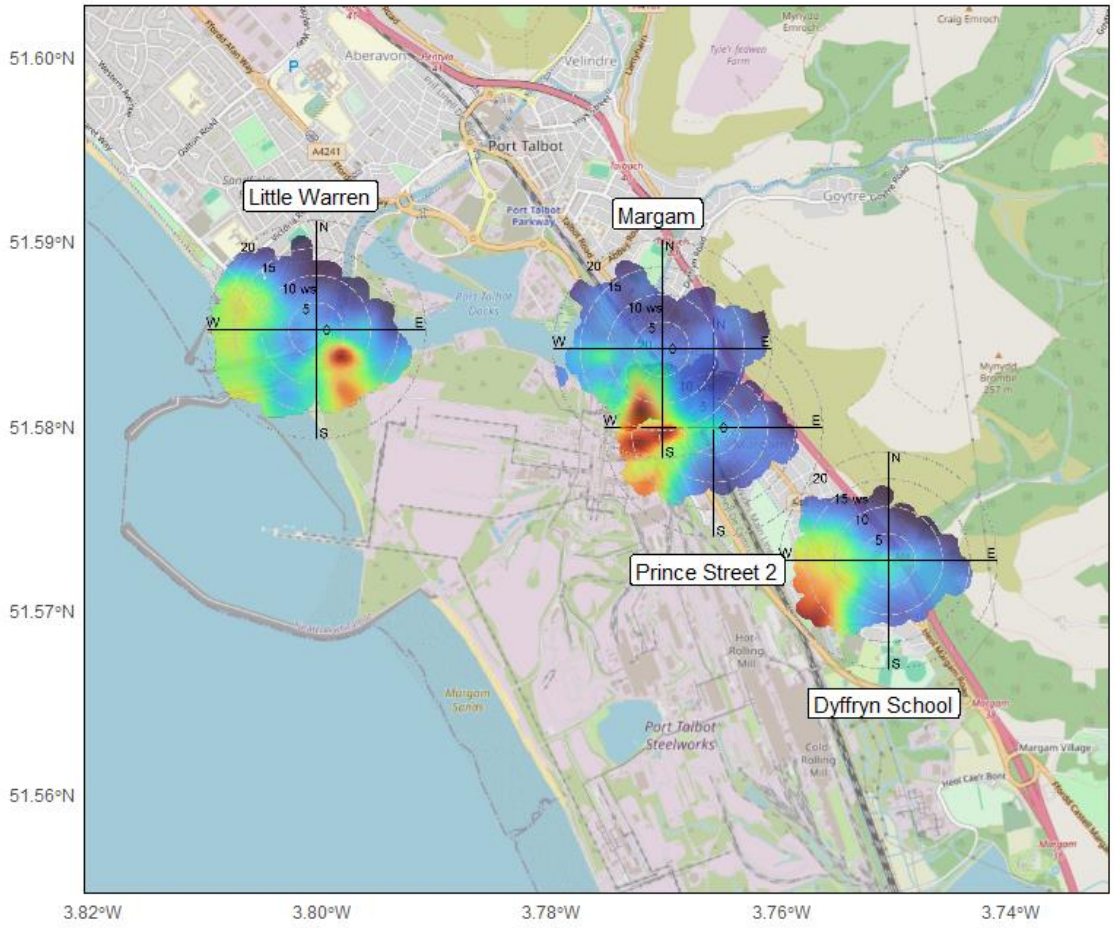


Figure 3-9 overlays bivariate polar plots from all four Port Talbot based measurement sites on a map. Each polar marker uses its own colour scale, which allows the greatest concentrations of PM_{10} *at each site* to be clearly visible.

Figure 3-9 Polar plots of Neath Port Talbot PM_{10} measurement sites overlaid on a map of Port Talbot. Map tiles by OpenStreetMap[33].



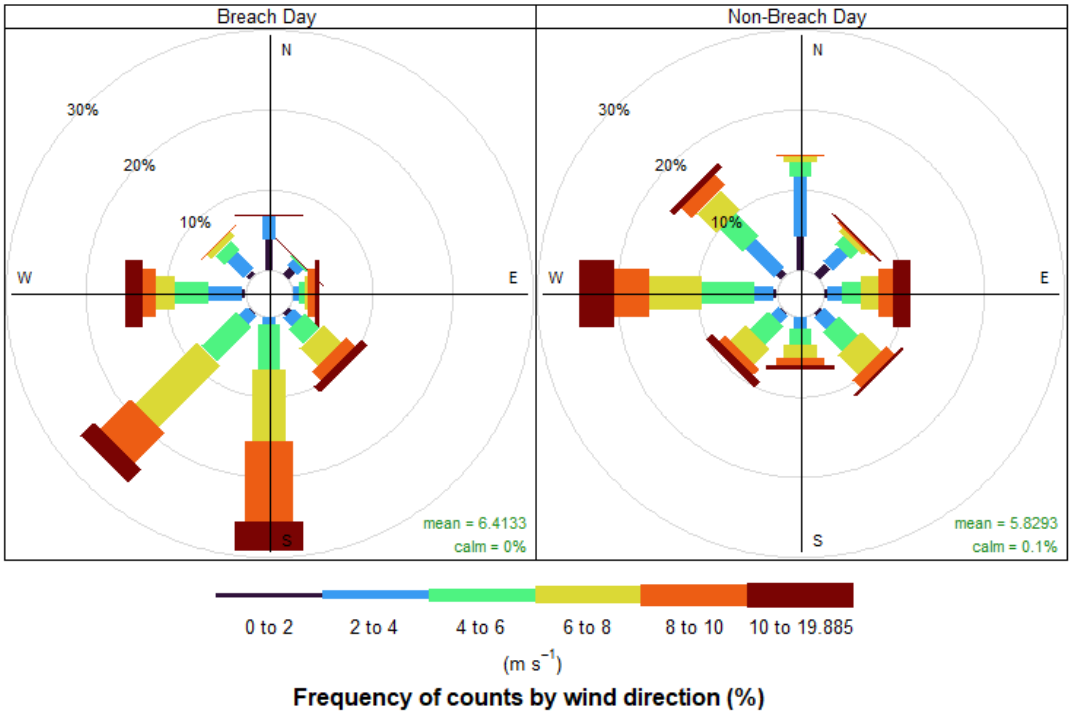
All four sites (Margam, Prince Street, Dyffryn School, Little Warren) show elevated concentrations of PM_{10} when the wind blows from the direction of the steelworks, relative to the positions of the sites.

The dominant wind direction at Port Talbot Margam can be further examined in the context of Margam's "breach days", defined as days with a measured daily average of PM_{10} greater than 50 µg m^{-3}. As

Figure 3-10

[33]OpenStreetMap contributors, 2017. Planet dump retrieved from https://planet.osm.org .

Figure 3-10 A wind rose showing the dominant wind conditions on both breach and non-breach days at Port Talbot Margam.



Another way to examine measured pollutant concentrations is to calculate, visualise and compare the conditional probability function (CPF) of different pollutants. The CPF shows the probability of a concentration measured at a certain wind condition being above a certain percentile of all measured concentrations. More about the CPF can be read in the openair book[34].

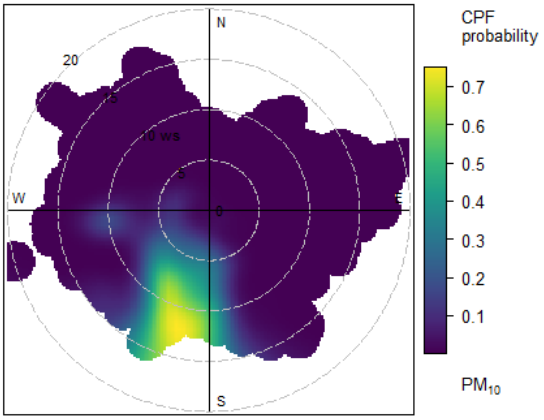
Figure 3-11 visualises the CPF for the 90th percentile of PM, NO_x and SO_2 concentrations. Higher probabilities are plotted in a yellow-green colour and lower probabilities in a dark purple. It is clear that, for PM_{10} and SO_2, the highest percentile of concentrations result from south-westerly wind - the direction of the steelworks. This correlation between PM_{10} and SO_2 likely suggests an industrial source of particulate matter.

[34] Carslaw, D., Davison, J., 2023. The openair book.

Conversely, NOx appears to show elevated concentrations in calm conditions, suggestive of a local traffic source. There also appears to be a lighter feature corresponding to high winds coming from the West South West. This second feature may be illustrative of combustion activity at the northern end of the steelworks distinct from the source(s) of the highest percentiles of particulate matter.

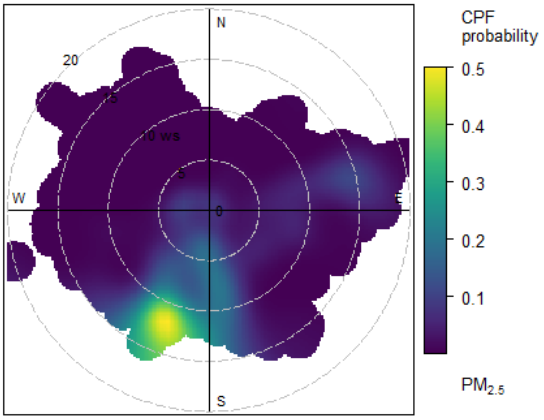
Figure 3-11 Conditional Probability Function (90th Percentile) polar plots of PM_{10}, $PM_{2.5}$, NOx and SO_2 at the Port Talbot Margam monitoring site.

a) PM_{10}



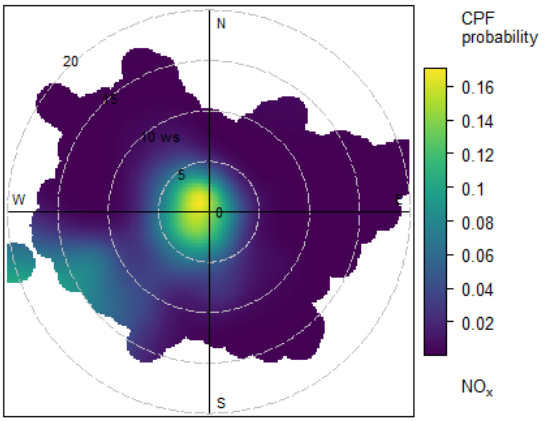
CPF at the 90th percentile (=53)

b) $PM_{2.5}$



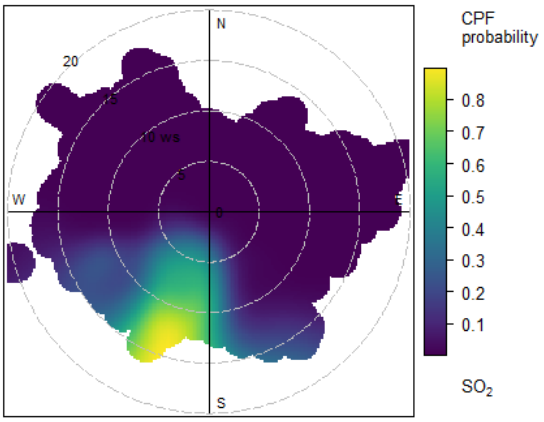
CPF at the 90th percentile (=17)

c) NO_x



CPF at the 90th percentile (=30)

SO_2



CPF at the 90th percentile (=4.8)

3.4 Key Priorities

Based on the current state of air quality in Neath Port Talbot, the public health and national and local policy context, and source apportionment of PM_{10} emissions and concentrations, the following areas are prioritised for action:

- Priority 1 - Improve overall air quality across the borough.
- Priority 2 - Through collaborative working, ensure that wider strategic air quality action is implemented through existing policy areas.
- Priority 3 - Developing partnerships and public education.
- Priority 4 - Assess and manage $PM_{2.5}$ exposure.

Priority 1 - Improve overall air quality across the borough

This includes measures which seek to prevent and reduce emissions of pollutants from known sources.

Regarding PM_{10}, the source apportionment presented in Section 3.3 demonstrates that the sources of PM_{10} in the AQMA which are within control of NPTCBC are industrial, and to a lesser extent, domestic and road transport related. Measures have been selected for this AQAP which target these source areas, and in particular industrial measures, with responsible owners for industrial measures including NPTCBC, NRW, and the most significant three permitted industrial operators: Tata Steel, Hanson Cement, Margam Green Energy.

All industrial measures are long-term ongoing measures which continue to be implemented to monitor, control and prevent emissions from stack and fugitive sources. Examples include:

Measures targeting PM_{10} from industrial, transport and domestic sources have co-benefits for other pollutants.

Priority 2 - Through collaborative working, ensure that wider strategic air quality action is implemented through existing policy areas.

This AQAP has been developed through collaboration across NPTCBC departments, with NRW and permitted industrial operators, and with other bodies including Public Health Wales, UKHSA, Swansea Bay University Health Board and Traffic Wales.

It considers and reinforces existing policies and measures in place which impact and seek to improve air quality in Port Talbot, considering air quality as a whole as well as individual pollutants.

NPTCBC consider it a priority to ensure collaborative working continues, and that air quality continues to be considered and managed through all relevant policy areas.

Examples of measures in the AQAP actions list (Table 5-1) which relate to this priority include:

Priority 3 - Developing partnerships and public education

Public education and partnerships have been selected as a priority for this AQAP because it aligns with the objectives of The Environment (Air Quality and Soundscapes) (Wales) Act 2024. Public engagement is essential to the long term overall improvement in air quality, as we need to make the public aware of their role in air quality particularly with new controls on domestic burning proposed.

It is important that the general public are informed about the status of air quality in Neath Port Talbot (measure 36), and informed about what actions individuals can take which can help improve air quality (measures 21,23,39).

Developing partnerships is key due to the variety of benefits from these measures which will have benefits in terms of health and reduction of carbon emissions.

Priority 4 - Assess and manage $PM_{2.5}$ exposure

$PM_{2.5}$ is of great importance from a human health perspective, because it represents the fraction of PM_{10} which is smallest, and can result in the greatest health impacts due to the extent that it can travel through the human respiratory system. Monitoring of $PM_{2.5}$ in Neath Port Talbot demonstrates that this pollutant is well under the UK and EU annual mean target of 25 $\mu g/m^3$. However, it is important to keep $PM_{2.5}$ under close review as a new $PM_{2.5}$ target will be set for Wales. NPTCBC are also aware that the $PM_{2.5}$ guideline from the World Health Organisation (WHO) is much stricter than the current target of 25 $\mu g/m^3$ (as of September 2021, the WHO guideline for annual mean $PM_{2.5}$ is 5 $\mu g/m^3$).

As $PM_{2.5}$ is a component of PM_{10}, the majority of measures which are targeting PM_{10} in the AQAP will also have benefits in terms of reduction of $PM_{2.5}$. For example:

Measure 34 - Homes as Power Stations - delivery of smart, low carbon energy efficient homes through new build developments, retro-fitting existing buildings, and local supply chain support development

Measure 38 - Investigate the development of a solid fuel and/or bonfire policy, once new legislation (Environment (Air Quality and Soundscapes)(Wales) Act 2024) is in place, and updated guidance or requirements are in place

4 Development and Implementation of NPTCBC's AQAP

4.1 Consultation and Stakeholder Engagement

TO BE COMPLETED FOLLOWING FORMAL CONSULTATION

The response to our consultation stakeholder engagement is given in Appendix A: Response to Consultation.

Table 4-1 Consultation Undertaken

Consultee	Consultation Undertaken

4.2 Steering Group

Steering Group Members

The Steering Group comprised of members from the Council, from national bodies, and from local businesses operating under environmental permits.

Members from the Council included the following departments: Environmental Health, Planning, Active Travel, Highways, City Deal and Low Carbon Growth and Transport teams.

National bodies involved in the Steering Group were: Natural Resources Wales, Public Health Wales, South Wales Trunk Road Agent, UK Health Security Agency.

Local industrial operators involved in the Steering Group included: Tata Steel, Hanson Cement, Green Energy Margam Ltd, Darlow Lloyd & Sons Ltd, Harsco

Environmental, Runtech Ltd, BOC Ltd Margam Gases, Tarmac Trading Ltd and Western Bio-Energy Ltd.

Name	Organisation
Leah Morgan	NPTCBC Environmental Health
Celvin Davies	NPTCBC Environmental Health
Michael Roosmalen	NPTCBC Environmental Health
Gareth Liley	NPTCBC Environmental Health
David Morris	NPTC Planning Policy Officer
Laura Pack	NPTCBC Active Travel
Amber Horton	Public Health Wales
Claire Fauvel	Swansea Bay University Health Board
Rhodri Morgan	Natural Resources Wales (NRW)
Gary Evans	NRW Air Quality Advisor
Richard Jones	South Wales Trunk Road Agent (Traffic Wales)
Steve Owen	NPTCBC Council Highways
Daniel Rees	NPTCBC Lighting and Buildings Services Manager
Tom Hunt	Hanson Cement, Production Manager
James Davis	Darlow Lloyd & Sons Ltd, Environmental Manager
Paul Callow	UKHSA, Environmental Public Health Scientist
Nathan Ace	Tata Steel UK Limited (Port Talbot)
Peter Quinn	Tata Steel UK Limited (Port Talbot)

Neil Haines	Tata Steel UK Limited (Port Talbot)
Paul Morgan	Harsco Environmental, Environmental Health and Safety Manager for South Wales
Paul North	Environment Manager, Runtech Ttd
Jonathan Batt	BOC Ltd Margam Gases
Paul Fitzsimmons	Margam Green Energy Limited, General Manager
Rachel Jordan	NPTCBC Planning Policy
Rebecca Sharp	NPTCBC Planning Policy - Countryside
Chris Davies	NPTCBC Planning Development
Nicola Lake	NPTCBC Planning Development
Brendan Griffiths	NPTCBC Transport
Huw Brunt	Public Health Wales
Hannah Morgan	Public Health Wales
Hayley Beharrell	Swansea Bay University Health Board
Marc Davies	Swansea Bay University Health Board
Paul Gibson	NRW
Brett Suddel	City Deal and Low Carbon Growth
Warren Scott	Hanson Cement
Ricky Guest	Tarmac Trading Limited
Scott Jenkins	Runtech Ltd
Simon Thomas	Western Bio-Energy Ltd

Steering Group Activities

The Steering Group were provided information about the AQAP process and the role of the Steering Group upon their invitation to the group.

Steering Group were invited by email to provide suggestions for measures for the AQAP measures longlist, for consideration at first Steering Group workshop.

Steering Group Workshop 20th July 2023

An online workshop was held for the Steering Group to provide an overview of the AQAP process, of the current air quality situation in Neath Port Talbot, and to discuss the longlist of AQAP measures. This included discussion of measures which had been compiled from existing policies, and how these could be improved or build upon, in addition to discussion of "new thinking" measures.

The workshop was well attended by most invited council departments and external organisations. Steering Group members also had the opportunity to raise questions, provide points of information and give feedback using the Teams chatbox within the meeting, and by email following the workshop. Condensed minutes from the workshop are provided in Appendix D.

Draft AQAP and measures shortlist

Following the workshop, the measures longlist was refined to the shortlist based on feedback received within the workshop, and follow-up emails and video calls were held with relevant Steering Group members to further discuss opportunities to go further.

Measures which were included in the longlist but not taken forward to the shortlist are included in Appendix B, with the reason why the measure wasn't pursued, including specific feedback from the Steering Group where applicable.

The AQAP was drafted and circulated to the Steering Group.

Monitoring and Evaluation of the AQAP, and maintenance as a "live strategy"

The Steering Group will continue to meet throughout implementation of the AQAP between 2024 and 2029. At minimum, Steering Group meetings will be held an annual basis. Responsible owners of actions, including departments within NPTCBC

and external partners will report on the progress to date of actions, including reporting against KPIs, and raising any barriers or delays to implementation and/or completion of measures.

If the annual review reveals evidence that unforeseen barriers to progress have arisen, or measures are no longer suitable, the AQAP should be updated to reflect NPTCBC's position.

5 AQAP Measures

Table 5-1 shows the NPT AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
    - “High” – measures which directly abate or remove key sources of emissions, either permanently or temporarily during high-risk conditions.
    - “Medium” – measures which directly or indirectly achieve a quantifiable reduction in emissions.
    - “Low” – measures which are likely to have a positive but unquantifiable impact on air quality. Effectiveness of such measures may be constrained by engagement or enforcement. This can include “soft actions” such as knowledge sharing or gathering actions to inform on air quality and measures.
- the timescale for implementation
    - It is important to note that the nature of many of these measures – particularly those addressing industrial emissions, are long term ongoing measures. This means it is difficult to define and/or trace back the measure start year, and the measure is anticipated to be ongoing for the foreseeable future.
- how progress will be monitored

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

5.1 Priority actions

The actions which are considered greatest priority in this action plan to the Council are:

- Measure 1: Participation in Welsh Government led multi-agency actions to investigate PM10 exceedances including monthly meetings.
- Measure 3: Regulation of NPTCBC permitted activities to ensure all permits are fit for purpose.
- Measure 26: Deployment of electric buses as part of decarbonisation plan
- Measure 28: Electric Vehicle (EV) Charging Infrastructure - identify and seek external funding opportunities to enable the installation of infrastructure initially at strategic locations and then across the wider County Borough.
- Measure 30: Closing of the blast furnace to be replaced with electric arc furnace (responsible owner: Tata Steel).
- Measure 36: Annual meeting of AQAP Steering Group.

The closure of the blast furnace is expected to reduce PM_{10} emissions by 176 tonnes. With the implementation of this measure and other priority measures, it is expected that NPT will achieve daily mean PM_{10} compliance in the near future.

The key priorities for the Steering Group organisations who are responsible owners for actions in Table 5.1 are as follows:

- Measure 4 - Regulation of NRW permitted activities (responsible owner: NRW).
- Measure 6 - Tata Steel daily data interpretation (concentrations, weather forecasts etc.) and response actions to minimise emissions and prevent breach days (responsible owner: Tata Steel).
- Measure 11 - Hanson Cement daily data interpretation (concentrations, weather forecasts etc.) and response actions, including: use of yard sprays, dampening or sweeping of access roads (responsible owner: Hanson Cement).
- Measure 14 - Notification of incidents or accidents which may impact air quality and/or breach permit conditions (responsible owner: Green Energy Margam)
- Measure 23 - Minimise hill fires through education and arson reduction actions (responsible owner: MAWWFIRE)

Table 5-1 Air Quality Action Plan Measures

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1	Participation in Welsh Government led multi-agency actions to investigate PM_{10} exceedances including monthly meetings	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Ongoing	Ongoing	Welsh Government, NPTCBC, NRW, industrial operators	Various	Yes	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather knowledge sharing and actions to inform on air quality	Meetings, dissemination of data and research	Various investigations, most recently the king's college monitoring report	Lack of participation or engagement by stakeholders
2	Local Authority led engagement with local businesses regarding air quality management planning and investigating PM_{10} exceedances	Environmental Permits	Other	Ongoing	Ongoing	NPTCBC, industrial operators	NPTCBC	Yes	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather knowledge sharing and actions to inform on air quality	Number of engagements	Ongoing	Lack of participation or engagement by stakeholders
3	Regulation of NPTCBC permitted activities to ensure all permits are fit for purpose	Environmental Permits	Other	Ongoing	Ongoing	NPTCBC	NPTCBC	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of emissions through regulation and enforcement of permit conditions	Compliance with permit conditions, measured emissions, activity logs	Ongoing action	Staff resourcing
4	Regulation of NRW permitted activities	Environmental Permits	Other	Ongoing	Ongoing	NRW	NRW	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of emissions through regulation and enforcement of permit conditions	Compliance with permit conditions, measured emissions, activity logs	Ongoing action	Staff resourcing
5	Dust reduction programme at TATA site	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	Ongoing	Ongoing	NRW, Tata Steel	NRW, Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of particulate emissions via NRW regulation	Implementation of improvement schemes, measured emissions data, monitored PM_{10} concentrations, number of dust nuisance complaints	The dust reduction programme will continue for the foreseeable future. Various improvements, including replacement of electrostatic precipitators with more efficient bag filters at the sinter plant in 2021.	None

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
6	Tata Steel daily data interpretation (concentrations, weather forecasts etc.) and response actions to minimise emissions and prevent breach days.	Environmental Permits	Other	Ongoing	Ongoing	Tata Steel, NRW	Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of emissions through implementation of response actions during occurrences and potential occurrences of high concentrations.	Breach day reports are completed every time that the 50µg is exceeded to see if discrete sources or causes can be identified. Monthly Data meetings are held to discuss data and trends, logs of response actions	Ongoing action	None
7	Tata Steel incidence communication and response actions	Environmental Permits	Other	Ongoing	Ongoing	Tata Steel, NRW	Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of emissions through implementation of response actions during occurrences and potential occurrences of high concentrations.	Data interpretation meetings, logs of response actions	Ongoing action	None
8	Tata Steel monitoring networks, including site boundary ambient monitoring, spot monitoring of point sources, stockpile monitoring and on-vehicle monitoring of haul roads	Environmental Permits	Other	Ongoing	Ongoing	Tata Steel, NRW	Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather knowledge sharing and actions to inform on air quality	Data is reported to NRW for permit compliance	Ongoing action	None
9	Wheel washers - operational and sensor communication status of site wheel washers are reviewed and issues are actioned.	Environmental Permits	Other	Ongoing	Ongoing	Tata Steel, NRW	Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	Medium - Direct reduction of particulates from unpaved site roads	Up to date action logs	Ongoing action	None

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
10	Road management processes - water bowsers deployed if dry conditions, temperatures excess in 15oC, wind direction and observations. Deployment of bowsers is monitored each and weekend deployment requirements are monitored each Friday. Sweepers also utilised.	Environmental Permits	Other	Ongoing	Ongoing	Tata Steel, NRW	Tata Steel	No	Fully funded	Not possible to estimate costs	Implementation	Medium - Direct reduction of particulates from unpaved site roads	Up to date observation logs	Ongoing action	None
11	Hanson Cement daily data interpretation (concentrations, weather forecasts etc.) and response actions, including: use of yard sprays, dampening or sweeping of access roads.	Environmental Permits	Other	Ongoing	Ongoing	Hanson Cement, NPTCBC	Hanson Cement	No	Fully funded	Not possible to estimate costs	Implementation	High: Direct reduction of emissions through implementation of response actions during occurrences and potential occurrences of high concentrations.	Data interpretation meetings, logs of response actions	Ongoing action	None
12	Hanson Cement staff training and awareness of permit conditions, operational practices and procedures for breach days and accidental emissions	Environmental Permits	Other	Ongoing	Ongoing	Hanson Cement, NPTCBC	Hanson Cement	No	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather knowledge sharing and actions to inform on air quality	Number of staff trained	Ongoing action	None
13	Air quality improvement programme: a study to determine the extent to which systems to minimise NOx emissions can be optimised, to reduce NOx emissions as far as possible without increasing emissions of other pollutants. Additionally, a programme of dioxin monitoring and of mercury monitoring.	Environmental Permits	Other	Ongoing	Ongoing	Margam Crem	Margam Crem	No	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality at this point, rather knowledge gathering actions to inform on air quality	Complete research report with recommendations	Ongoing action	None

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
14	Notification of incidents or accidents which may impact air quality and/or breach permit conditions	Environmental Permits	Other	Ongoing	Ongoing	Green Energy Margam, NRW	Green Energy Margam	No	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather knowledge sharing and actions to inform on air quality	Up to date notification log	Ongoing action	None
15	Planning policies to resist development on air quality ground where appropriate, through the Local Development Plan (LDP) 2011-2026 and the Replacement Local Development Plan (RLDP).	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	LDP: 2011 RLDP: 2021	LDP: 2026 RLDP: 2036	NPTCBC, Welsh Government	NPTCBC	No	Fully funded	Not possible to estimate costs	Implementation (LDP 2011-2026) Planning (RLDP 2021-2036)	Low - No reduction of existing emissions, rather, prevention of possible additional emissions	Number of planning applications reviewed	The LDP is in force. In terms of planning for the RLDP, a review of the LDP has been completed, and the review report is submitted to Welsh Government. An Integrated Sustainability Appraisal scoping report has been completed.	Lengthy timescale
16	Review and update air quality policies in the Replacement Local Development Plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	Unknown	NPTCBC	NPTCBC	No	Fully funded	Not possible to estimate costs	Planning	Low - No reduction of existing emissions, rather, prevention of possible additional emissions	Completion of review and update of air quality policies	RLDP is still in early stages of being updated.	Consultation delays
17	Travel plans	Promoting Travel Alternatives	Personalised Travel Planning	2024/2025	2025	NPTCBC	Welsh Gov / NPTCBC	No	Partly Funded	20K	Implementation By April 2025	Low - Direct but unquantifiable impact on reducing emissions.	Travel plan implemented	Part implemented but not complete	None
18	School active travel plans and educational activities	Promoting Travel Alternatives	School Travel Plans	2024/2025	2025	NPTCBC	Welsh Gov / NPTCBC	No	Partly Funded	20K	Implementation By April 2025	Low - Direct but unquantifiable impact on reducing emissions.	Number of plans in place, number of pupils walking/cycling to school	61 plans in place currently being updated to reflect the new Active Travel template	None
19	Delivery of cycle training and active travel education	Promoting Travel Alternatives	Promoting cycling, promoting walking	Ongoing	Ongoing	Road Safety Team Neath Port Talbot Council	Welsh Government & LA	No	Partially funded	50K-100K	Implementation	Low - Direct but unquantifiable impact on reducing emissions.	Number of training sessions conducted, Number of participants	Funding by Welsh Government is secured annually. The Road Safety Team at NPTC delivers cycle training to all ages and abilities by utilising funding from WG as well having our own Cycle Instructor funded internally. Wed also deliver pedestrian training for all ages and this again is funded by both WG and LA.	No barriers - training is sought after by public and schools and training goes on all year.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
20	Improvements to active travel facilities, e.g cycle storage.	Promoting Travel Alternatives	Cycle network	Ongoing	Ongoing	Neath Port Talbot Council	WG Active Travel Fund	Yes	Applications for funding made annually	Site specific	Ongoing	Low - Direct but unquantifiable impact on reducing emissions.	Number of cycle infrastructure	There has been installation of 3 cycle shelters in 2022/2023: Aberavon Shopping Centre, Aberavon Beach and Port Talbot Train Station. Cycle hoops also been installed in Cymmer near to the refreshment rooms, to replace cycle storage which had fallen into disrepair. To help encourage more people to cycle, Neath Port Talbot Council has launched a scheme whereby we are giving away up to four free cycle stands to organisations in locations where cycle parking is needed An interactive map has been created to show where cycle storage is available in NPT, the map will be placed on the councils webpage allowing residents or visitors to view photos and locations of the available cycle storage before travelling. In the past 2 financial years, a total of 11 new seats were installed in locations alongside cycle routes in the county borough.	None
21	Provision of Active Travel information via NPTCBC website	Public Information	Via the Internet	Ongoing	Ongoing	Neath Port Talbot Council	WG Active Travel Fund	Yes	Applications for funding made annually	Estimated <£10K per year	Ongoing	Low - Direct but unquantifiable impact on reducing emissions.	Number of website visits	The council launched it's new active travel webpage last year, which can be found here: www.npt.gov.uk/activetravel this includes a link to NPT's Active Travel Network Maps. Further changes to the website are planned this financial year.	None
22	Minimise industrial and commercial fires	Other	Other	Ongoing	Ongoing	NPTCBC, NRW, M&WWFIRE	NPT, NRW, M&WWFIRE	No	Fully funded	Not possible to estimate costs	Implementation	High - Direct reduction of emissions through preventative and remedial action	Number of complaints about industrial commercial fires investigated	No problems in recent years	None
23	Minimise hill fires through education and arson reduction actions.	Other	Other	Ongoing	Ongoing	MAWWFIRE	MAWWFIRE	No	Fully funded	Not possible to estimate costs	Implementation	High - Direct reduction of emissions through preventative and remedial action	Number of hill fires, estimated emissions from fires	Community fire safety team targets	None

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
24	Street sweeping carried out as required to remove particulates from the highway	Transport Planning and Infrastructure	Other	Ongoing	Ongoing	NPTCBC	NPTCBC	No	Fully funded	Not possible to estimate costs	Implementation	Medium - Direct reduction of particulates from the highway	Records of street sweeping activities	Sweeping has been carried out at TATA's request on several occasions	None
25	Improvements to public transport (buses)	Transport Planning and Infrastructure	Public transport improvements	2027	Unknown	WG, TfW, NPTCBC, Bus Operators	WG	No	Fully funded	Not possible to estimate costs	Planning	High: Direct reduction of particulate emissions	Number of buses retrofitted or improved	Bus Bill passed	Funding Cooperation from bus operators
26	Council Fleet / Plant - conduct an assessment of the suitability of new technologies that come onto the market to determine their viability for use as part of the Council's fleet of vehicles and plant	Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	Ongoing	Ongoing	NPTCBC	NPTCBC	No	Fully funded	£1 million - £10 million	Planning	Low - No reduction of existing emissions, rather, prevention of possible additional emissions	Increase the number of Annual alternative fuelled vehicles within the Council's fleet. Increase the EV infrastructure at The Quays and other Council locations to allow for expansion of the ULEV fleet.	Planning phase	None
27	Electric Vehicle (EV) Charging Infrastructure - identify and seek external funding opportunities to enable the installation of infrastructure initially at strategic locations and then across the wider County Borough	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2019	2025	NPTCBC	NPTCBC	No	Partially Funded	£1M-£10M	Planning – the NPT ZEVIS (Zero Emission Vehicle Infrastructure Strategy) adopted Nov '23 which identifies funding streams and Priority Focus	50,000 T CO2 400 T N2O (per year) Figures taken from NPT ZEVIS report	Number of EV charging points installed	EV infrastructure installed at 4 strategic locations across the wider County Borough	Barriers include Grid Capacity, Lead times for DNO Grid Connection, Planning/Highways considerations to on-street charging solutions, Procurement of commercial partners and equipment and resources to deliver outcomes within 12 month funding timeline

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
											Areas leading to a Fast Track Programme				
28	Taxi licensing policy: in parallel with the emerging EV infrastructure, monitor/review the current policy to explore proposals to promote and encourage the take up of low emission taxis	Promoting Low Emission Transport	Taxi Licensing conditions	Ongoing	Ongoing	NPTCBC	NPTCBC	No	No funding available	Nil	Completed	Low - No reduction of existing emissions, rather, prevention of possible additional emissions	Measure the number of licensed low emission taxis and explore any incentives that could encourage the uptake of ULEVs	An amendment to the Taxi Licensing Policy was approved by the Registration and Licensing Committee in March 2023 following consultation with the hackney carriage and private hire trades. The Taxi Licensing Policy requires that all new hackney carriage vehicles must be wheelchair accessible. This requirement has now been removed for fully Electric Vehicles. To date, two fully electric vehicles have been licensed.	Fees for taxi licensing are calculated to recover as far as possible the actual costs of providing the service. Legislation dictates that the Council is not permitted to make a profit from the fees it charges. Any incentives offered to increase the uptake of fully electric vehicles as taxis, would result in a decrease in income.
29	Sustainable Biofuels (Lanzatech Project) - assist in the delivery of a biofuel pilot project which will utilise waste gases from the TATA plant.	Promoting Low Emission Plant	Shift to installations using low emission fuels for stationary and mobile sources	Ongoing	Ongoing	NPTCBC, Welsh Government	Various	No	Fully funded	£10 million	Planning	Low - Direct but unquantifiable impact on reducing emissions.	Completion of pilot project	Letter in support in principle is provided to the company to facilitate funding applications. Funding is secured by the company. All necessary permissions are granted. The facility is constructed on schedule using local supply chains and becomes operational.	None
30	Closing of the coke ovens, blast furnace, sinter plant and other heavy end facilitiesto be replaced with electric arc furnace	Promoting Low Emission Plant	Shift to installations using low emission fuels for stationary and mobile sources	2024	Unknown	Tata Steel	Tata Steel, UK Government	No	Fully funded	£1.25 billion	Planning	High: Direct reduction of particulate emissions of 179.46 tonnes or approx. 10% of emissions of industrial point sources	Completion of project	Funding secured	None
31	Active Travel Network improvements	Transport Planning and Infrastructure	Cycle/walking network	Ongoing	Ongoing	NPTCBC	Active Travel Act Fund	Yes	Fully funded	£500K-1million	Planning / Implementation	Low - Direct but unquantifiable impact on reducing emissions.	Completion of projects	Sandfields Masterplan: We will develop detailed designs for three active travel routes in the Sandfields area. Neath to Cimla: We will be creating a detailed design for the active travel route connecting Neath to Cimla.	None

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
														Neath Town Centre Masterplan: We will be developing outline designs for three routes within Neath Town Centre. Taibach to Goytre Links: Prepare an outline design for the active travel link between Taibach and Goytre. A48 Link to NCN47: Conduct a feasibility study to explore route improvements linking the A48 at Briton Ferry Roundabout to National Cycle Network Route 47 (NCN47) at Neath Canal. Accessibility Improvements: Implement dropped kerbs and tactile paving on five active travel routes, enhancing accessibility for all users, particularly those with mobility or visual impairments. Improvements to NCN4 Taibach: We will be undertaking route improvements at Margam Education Centre and installing lighting on the lane at the rear of Rhodfa Glan-y-Mor, improving safety and usability of the route and encouraging more active travel. Facilities Upgrades: Replace non-compliant barriers and moving signage which is obstructing NCN4 in Briton Ferry. Active Travel Network Map Development Map related facilities such as public seating, barriers, and crossings on existing routes. This mapping exercise will provide data to feed into planning and improving active travel infrastructure. An annual update of future and existing routes on DataMapWales will be undertaken in November 2024. Monitoring and Evaluation: Collect data to influence design and for ongoing monitoring and evaluation. Data collection will capture the speed and volume of vehicles, as well as the number of pedestrians and cyclists.	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
32	Public rights of way network (PROW) improvements.	Planning and Engineering and Transport	Cycle/walking network	2021-2022	2022	NPTCBC	NPTCBC/ WG	No	Complete	£100k - £500k	Completed	Low - Direct but unquantifiable impact on reducing emissions.	Planned schemes completed	Planned schemes include: Byway 49 (Glyncorrwg) - Nant Tewlaeth Footbridge Footpath 12 MST (Pelenna) Byway 111.PT (Cwmafan) Bridge on Byway 111 Footpath 93 lgk (Ystalyfera) Betting Colliery Footbridge. Footpath 18.0Hi (Nant y Cafn) – Nant y Cafn footbridge. Byway 9.0 Hi (Nant Melyn) Footpath 39 & 5 (Primrose Lane) Footbridge of Footpath 39. Footpath 106 lgk (Penrhiw Fawr) Replacement bridge. 50% contribution to be offered towards the cost of replacing the Bryndda Bridge on the boundary between NPT and Bridgend.	None
33	Homes as Power Stations - delivery of smart, low carbon energy efficient homes through new build developments, retro-fitting existing buildings, and local supply chain support development.	Promoting Low Emission Plant	Other measure for low emission fuels for stationary and mobile sources	Ongoing	Ongoing	NPTCBC	City Region Deal	No	SBCD – fully funded	£15m total	Implementation	Medium - project includes plans to directly reduce emissions from existing domestic heating sources.	Number of new build and annual refurbishment projects completed. Implementation of supply strategy for Haps. Development of skills and training programme for Haps.	Financial Incentives Fund has been launched supporting the development and implementation of creating cleaner, greener, more energy efficient homes.	Uptake by private individuals, cost
34	Air Quality Monitoring Pilot Study	Other	Other	2021	2023	NPTCBC, Swansea Bay City Deal (project 'Supporting Innovation and Low Carbon Growth')	Swansea Bay City Deal	No	Fully funded	£100k - £500k	Implementation	Low - No direct impact to air quality, rather a knowledge gathering action to improve air quality evidence base.	Monitoring data, increased understanding	2 year monitoring scheme nearing end, final QA/QC, reporting and source apportionment analysis to be completed.	Monitor downtime resulting in lack of data for a period of time - rare occurrence
35	New communication system for reporting hyperlocal air quality data and advice to public	Public information	Via the internet	2024	Ongoing	NPTCBC, Swansea Bay City Deal (project 'Supporting Innovation and Low Carbon Growth'), Vortex, Ricardo	Swansea Bay City Deal	Yes	Not obtained	£10k - £50k	Planning	Low - No direct impact to air quality, rather public knowledge increased	Public engagement via internet	Planning phase	Monitor downtime resulting in lack of data for a period of time - rare occurrence

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
36	Annual meeting of AQAP Steering Group	Policy Guidance and Development Control	Other policy	2023	2028	AQAP Steering Group: NPTCBC,	Various	No	Fully funded	Not possible to estimate costs	Implementation	Low - No direct impact to air quality, rather an action to inform on and manage air quality	Annual meetings of AQAP Steering Group	Ongoing	Lack of participation or engagement by stakeholders
37	Investigate the development of a solid fuel and/or bonfire policy, once new legislation (Environment (Air Quality and Soundscapes)(Wales) Act 2024) is in place, and updated guidance or requirements are in place.	Policy Guidance and Development Control	Other policy	2024	Unknown	Local Authority Environmental Health, with input from Waste Teams	Welsh Government and NPTCBC	Yes	Not applied for funding as awaiting requirements of the Act	Not possible to estimate costs until requirement clearer	Planning	Low - unquantifiable reduction in emissions.	Up to date policy available on NPT website	Planning phase	None
38	Educational awareness campaign, covering domestic sources and what steps individuals can take to reduce their own air quality emissions.	Public Information	Leaflets, social media, school visits	2024	Ongoing	Local Authority Environmental Health,	Welsh Government LAQM Fund	Yes	Funding awarded	£10k	Planning	Low - Direct but unquantifiable impact on reducing emissions.	Number of training sessions conducted, Number of participants	Planning phase	None
39	Research into the extent, occurrence and source apportionment of fugitive emissions of PM and dust emissions in Port Talbot	Other	Other	2024	Ongoing	Local Authority Environmental Health, Tata, NRW	NPTCBC	No	N/A	£10k	Implementation	Low - No direct reduction in emissions, but source apportionment will be useful in identifying pollution episodes, forecasting and handling dust complaints.	Completion of research	Ongoing	None
40	Study into the M4 Port Talbot 50mph speed limit J41 to J42 - i.e. the consideration of measures along the M4 and trunk road network for nitrogen dioxide reduction	Traffic Management	Reduction of speed limits	2024	2025	Welsh Government	LAQM Fund	Yes	Funding awarded	<£10k	Planning / Implementation	Low - No direct reduction in emissions, but study will be useful in identifying measures that have direct emissions reduction.	Completion of research	Planning/Implementation phase	Whilst at present, the existing 50mph speed limit zone has been extended from J41 to J42, the Welsh Government has not ruled out further measures including the closure of slip roads.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra or Welsh AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
41	Hydrogen bus trials	Promoting Low Emission Transport	Other	2023	Ongoing	NPCBC, Swansea University, South Wales Transport, Hyppo Hydrogen solutions, Caetano Bus UK, Fuel Cell Systems, Protium, University of South Wales Hydrogen Centre	Various	Yes	Partial funding received	£250m	Planning	Low - No direct reduction in emissions, but will provide gateway for deployment of hydrogen bus fleet which has direct emissions reduction	Completion of trials with details of emissions reductions achieved.	Trials have commenced in Neath Port Talbot and Swansea in June 2023.	None

Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

TO BE COMPLETED FOLLOWING FORMAL CONSULTATION

Consultee	Category	Response

Appendix B: Reasons for Not Pursuing Action Plan Measures

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

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Public information	Air Alerts	Feedback was that air alerts in some forms are prone to inciting panic and can result in unnecessary pressure on NHS and health services
Promoting Travel Alternatives	NPT Agile Working Scheme	Measure completed for NPTCBC staff - Agile home working policy in place.
Alternatives to private vehicle use	NPT car share scheme	Measure in place for NPTCBC staff. Considered to be too low impact in relation to the overall AQ issues in NPT, to warrant inclusion in the AQAP actions list, though agreement to highlight how NPT is leading by example in the main body of the AQAP.
Promoting Travel Alternatives	NPT bike to work scheme	Measure in place for NPTCBC staff. Considered to be too low impact in relation to

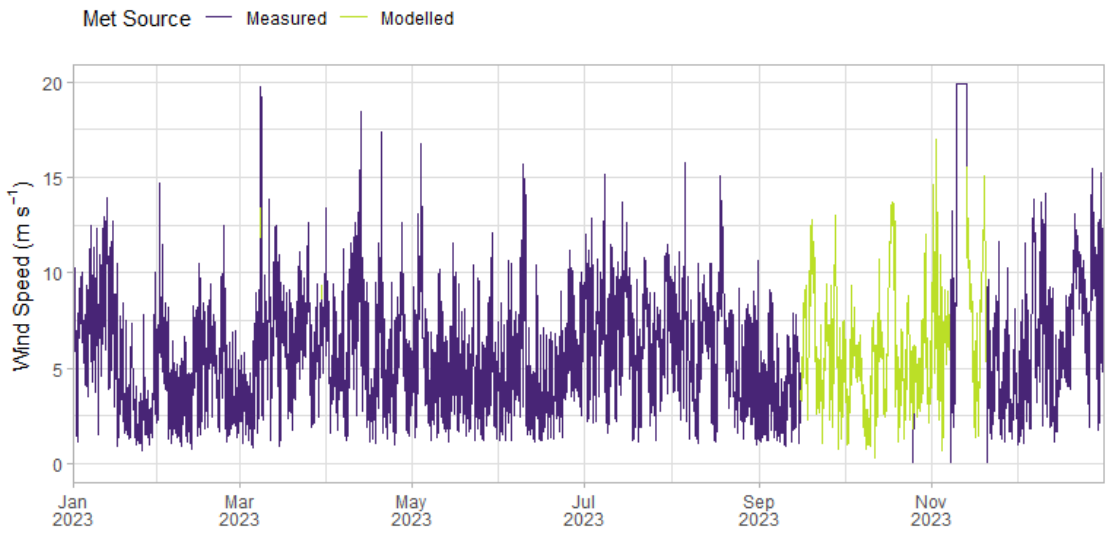
Action category	Action description	Reason action is not being pursued (including Stakeholder views)
		the overall AQ issues in NPT, to warrant inclusion in the AQAP actions list, though agreement to highlight how NPT is leading by example in the main body of the AQAP.
Other	Train haulage emissions: Investigate cases of visible mineral emissions from trains	Investigation of haulage emissions hasn't been required for years. Source apportionment has not shown emissions from trains to be significant. No further action in considered necessary, unless future monitoring and source apportionment indicates trains and haulage train emissions to be of concern.
Other	Provision of green waste recycling to minimise domestic bonfires	Measure is considered completed as green waste recycling service continues to be provided by the Council. Monitoring of this as an ongoing measure not considered useful, as it cannot provide information about the potentially reduction of emissions from domestic waste fires.

Appendix C: Source apportionment using measurement data: meteorological data sources and gap filling

Additional technical information supporting the source apportionment analysis using measurement data, as presented in Section 3.3.

The majority of the analysis of 2023 data has been undertaken using measured meteorological data from the Margam AURN monitoring site. However, due to technical issues with instruments not working, there was a period from mid September into November 2023 when measured meteorological was missing. This data was gapfilled using WRF modelled data, to allow for a full analysis of the calendar year measured PM_{10} concentration data against wind speed and direction data. Figure C1 shows a timeseries of the origin of meteorological data for 2023.

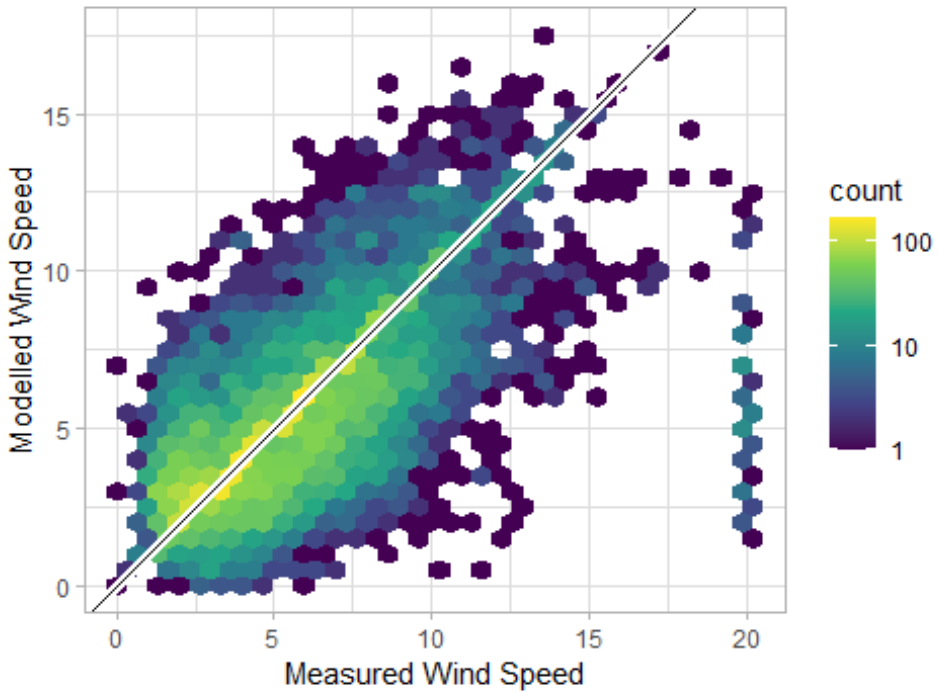
Figure C1: A timeseries showing the origin of met data at the Port Talbot WAQN site



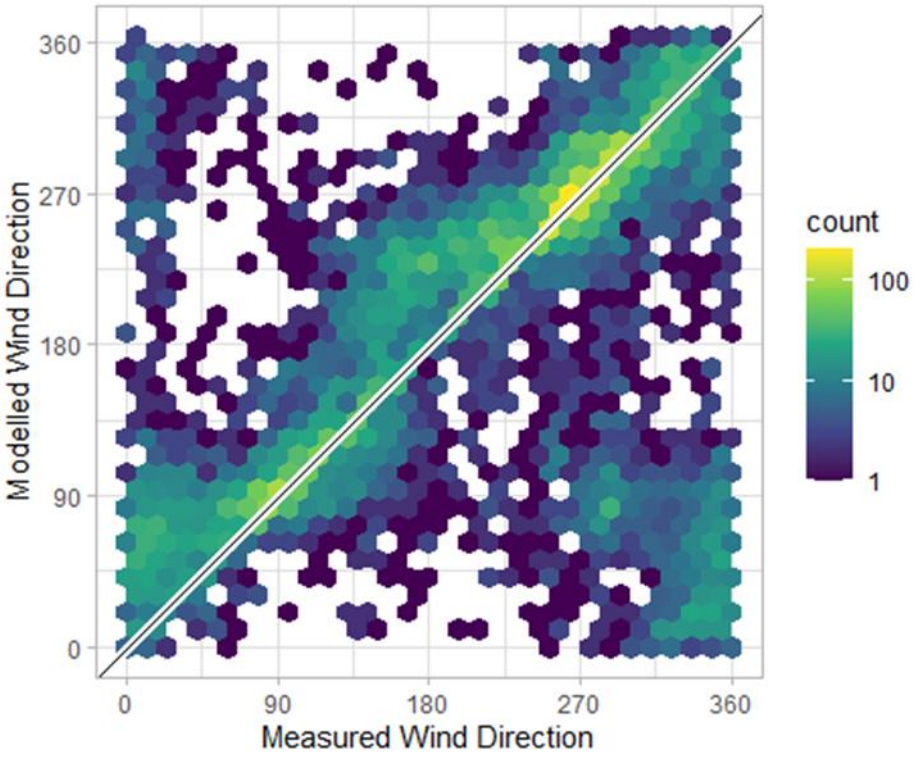
Analysis was conducted to investigate the difference between the measured and modelled meteorological data. Figure C2 shows comparison plots between modelled and measured wind speed and direction.

Figure C2: Hexagonally binned comparisons between measured and modelled wind speed and direction data at Port Talbot Margam

(a) Wind Speed



(b) Wind Direction


Modelled Wind Direction
360
270
180
90
0
0
90
180
270
360
Measured Wind Direction
count
100
10
1

Appendix D: Minutes from NPT AQAP Steering Group Workshop

Date: 20 July 2023

Time: 14:00-16:00

1. Participants

Air quality consultants from Ricardo are supporting Neath Port Talbot County Borough Council (NPTCBC) in the update of their Air Quality Action Plan (AQAP) and are facilitating this workshop for the Steering Group. Ricardo Team: Abigail Pepler, Senior Air Quality Consultant; Sarah Foll, Principal Air Quality Consultant**;** Patrick Harland, Air Quality Consultant.

1.1 Steering Group members in attendance

Name	Organisation
Leah Morgan	NPTCBC Environmental Health
Celvin Davies	NPTCBC Environmental Health
Michael Roosmalen	NPTCBC Environmental Health
David Morris	NPTC Planning Policy Officer
Laura Pack	NPTCBC Active Travel
Amber Horton	Public Health Wales
Claire Fauvel	Swansea Bay University Health Board
Rhodri Morgan	Natural Resources Wales (NRW)
Gary Evans	NRW Air Quality Advisor
Richard Jones	South Wales Trunk Road Agent (Strategic Road Network)

Steve Owen	NPTCBC Council Highways
Daniel Rees	NPTCBC Lighting and Buildings Services Manager
Tom Hunt	Hanson Cement, Production Manager
James Davis	Darlow Lloyd & Sons Ltd, Environmental Manager
Paul Callow	UKHSA, Environmental Public Health Scientist
Nathan Ace	Tata Steel UK Limited (Port Talbot)
Peter Quinn	Tata Steel UK Limited (Port Talbot)
Neil Haines	Tata Steel UK Limited (Port Talbot)
Paul Morgan	Harsco Environmental, Environmental Health and Safety Manager for South Wales
Paul North	Environment Manager, Runtech Ttd
Jonathan Batt	BOC Ltd Margam Gases
Paul Fitzsimmons	Margam Green Energy Limited, General Manager

1.2 Steering group members unable to attend

Name	Organisation
Gareth Liley	NPTCBC Environmental Health
Rachel Jordan	NPTCBC Planning Policy
Rebecca Sharp	NPTCBC Planning Policy - Countryside
Chris Davies	NPTCBC Planning Development
Nicola Lake	NPTCBC Planning Development

Hannah Morgan	Public Health Wales
Hayley Beharrell	Swansea Bay University Health Board
Marc Davies	Swansea Bay University Health Board
Paul Gibson	NRW
Brett Suddel	City Deal and Low Carbon Growth
Warren Scott	Hanson Cement
Ricky Guest	Tarmac Trading Limited
Scott Jenkins	Runtech Ltd
Simon Thomas	Western Bio-Energy Ltd

2. **Introduction and Health Impacts of Air Pollution [Presented by Patrick Harland, Ricardo]**

- Provided an overview of the health impacts of poor air quality, highlighting health effects caused by PM in particular, and who in society is most vulnerable.

- Provided an overview of the pollutants of concern in Neath Port Talbot.

2. Chat Box Discussion – Health Impacts of Air Pollution

[14:18] Amber Horton (Public Health Wales)

Please note, mortality burden estimates quoted are not 'actual deaths' they are 'attributable deaths' – there are a lot of caveats with interpreting these.

3. **Project Background [Presented by Abigail Pepler, Ricardo and Patrick Harland, Ricardo]**

- Provided an overview of what the AQAP air quality action plan process should include and our approach to updating the plan for Neath Port Talbot.

3. Chat Box Discussion – Project Background

[14:19] Nathan Ace (Tata Steel)

Just a quick point of clarity, is the AQAP replacing the previous termed STAP?

[14:20] Amber Horton (Public Health Wales)

So, the AQAP has not been reviewed in the 5-year period as mentioned?

[14:31] Leah Morgan (NPTCBC Environmental Health)

No Nathan, the Air Quality Action Plan is separate to the STAP.

No Amber, the AQAP has not been updated in that timeframe.

- Provided an overview of the policy context at the national and local level.
- Provided an overview of the current state of air quality in Port Talbot.
- Provided an overview of sources of PM_{10} in Neath Port Talbot, highlighting that the largest contributing source which is possible to control is industry, followed by domestic sources, then transport. (Residual and salt, and secondary PM are the greatest overall sources of PM_{10} but not possible to control).
- Presented the AQAP Priorities proposed by the Council.

4. **Measures Discussion**

Feedback sought from the steering group on the ongoing measures gathered. Specifically, feedback on: any measures missed (ongoing, new or planned); measures no longer relevant; mitigation actions considered but abandoned; and feedback on the opportunities where the AQAP could build on existing measures or introduce further measures.

4.1 Discussion – Measures to tackle Industrial Stack Emissions

Amber Horton (Public Health Wales) - Regarding the communication of air quality warnings to the public and the publicity campaign.

- We need to be mindful of public health messaging distributed.
- You don't want unintended consequences of the public rushing to hospitals and GP's as has happened previously. Due to NHS demands and pressures, proportionate messaging is needed.
- Example – if there is an air pollution episode, messaging needs to be carefully considered because we don't want to discourage, for example, active travel – it has benefits and can outweigh the negative health effects of exposure (with caveats). We need to be careful, it needs appropriate collaboration with partners
- We don't want people thinking to drive because it is not safe outside- that will make air quality worse, so it's about appropriate messaging.

Celvin Davies (NPTCBC Environmental Health) – Agrees with Amber on this point.

- The LA tried this a few years ago and it did have the effect of panic and increased use of health facilities.
- We had a text-message alert system previously.
- As a local authority we are seeing mixed communication and mixed messages
- When you look at the technical compliance we are reporting, we are not getting the breaches of PM_{10} that the AQMA was originally set up to deal with. But there is a perception here in Port Talbot, that there is a higher pollution rate, I think some of this is around interpreting what the data is saying.
- Some of the public information does focus on air quality indexes. We'd be keen as a local authority to see how this could work. There are some apps that deal with this but don't compare the AQI to objectives.
- It won't go into the objectives part of it but gives a daily air quality index.
- There is a need to examine the difference between PM_{10} and nuisance dust in the community as negative feedback around pollution focuses on this.
- The nuisance dust is causing more of a concern despite monitoring data showing PM_{10} has been reduced over time.
- We are aware there are some emerging pollutants of concern such as PAHs.
- It is how we communicate we are doing well at reducing some pollutants but not all. The dust component may not have been a part of the original thinking of this AQAP.

Sarah Foll (Ricardo)

- Everything communicated needs a clear purpose and clarity.
- Regarding nuisance dust and PM_{10} the difference of these pollutants may need to be communicated to the public.
- Generally when communicating messages about air pollutants it is important that the public know what these pollutants are before the communication.

Abigail Pepler (Ricardo)

- Question for Tata representatives about the potential for abatement through replacement of electrostatic precipitators. What's the status of this measure?

Neil Haines (Tata Steel)

- That was installed in summer 2021 and is in place.

Abigail Pepler (Ricardo)

- This will be reflected in the plan where we highlight work already done.
- Is there any thought on 5 day forecasting to help plan further ahead?

Nathan Ace (Tata Steel)

- We currently work off trend data to inform us when we are potentially approaching exceedance of PM_{10}.

- We take action ceasing some operations or deploying additional abatement measures.
- It's the confidence of the forecasting that is in question. The forecasting would heavily impact our operations and therefore our financials. So, the accuracy would need to be at a good level.

Abigail Pepler (Ricardo)

- Could the extent to which the current air quality warnings are currently communicated go further? Can information be disseminated to help other industry operators or the councils so they can put in their reactive measures, if the daily forecast is looking poor?

Nathan Ace (Tata Steel)

- This could be an option, it's something we could look at by providing communication about what the PM_{10} levels are looking like and when we'd take action.

Celvin Davies (NPTCBC Environmental Health)

- As a local authority we are keen to look at forecasting.
- We have got other monitors and sensors in the community so we would be keen to see if this new technology could help with forecasting.
- We would like to learn examples from the Scunthorpe situation, particularly setup.

4.1.1 Chat Box Discussion – Industrial Measures (Stack Emissions)

[14:48] Amber Horton (Public Health Wales)

We also don't want this to be in place of continuing to reduce air pollution levels. The main focus needs to be reducing the air pollution. Focus on prevention rather than reaction.

[14:50] Paul Callow (UKHSA)

Effects of an air pollution personal alert system on health service usage in a high-risk general population: a quasi-experimental study using linked data - https://pubmed.ncbi.nlm.nih.gov/27217535/

4.2 Discussion – Industrial Measures (Fugitive Emissions)

Amber Horton (Public Health Wales)

- Need to be mindful of suggested measure for increased concrete coverage, there can be flood risks from concrete.

Claire Fauvel (Swansea Bay University Health Board)

- Echoing Amber, the whole area is concrete and there is certainly a role in the nature recovery and regreening agenda.
- There is a lot of technology out there that is low maintenance that abates impacts of poor air quality.
- No air pollution is good for our communities, the green infrastructure development could provide a lot of capital in terms of health and wellbeing and mitigation the health impacts of poor air quality.
- Neath Port Talbot have limited staff working in green infrastructure, they're looking for grant funding to take forward this work, if we could use the AQAP to help with this work.

Abigail Pepler (Ricardo)

- To explain, the increased concrete coverage suggestion is about unpaved roads within industrial complexes.

Celvin Davies (NPTCBC Environmental Health)

- I was going to return and say there is a specific action from Tata, about unpaved roads.
- With regards to fugitive emissions, from a local authority point, we have a good understanding what's happening with Tata and Hanson, due to them being regulated sites. It would be good to know what else is happening in the area.
- Some businesses on the call might not have any dust issues, it's worth us trying to capture this as a local authority to see what needs to be dealt with. If there is any fugitive dust or anything like that, we haven't captured, then we are supportive of coming down and having a look to see what's going on there.
- Also giving advice as a part of an action. As we only have Tata and Hanson captured in this plan historically, but there are other activities in the area .

Abigail Pepler (Ricardo)

- One of the difficulties when we are looking at industrial emissions, is the number of different people needed to be brought into the conversation.
- How do we want to capture the work that everybody is doing in the AQAP?
- Do we want to have actions in the AQAP that are broader, that encompass all the work that permitted sites need to do or do we want actions that are held as a responsible owner by each of the permitted organisations?
- It may be easier back to these questions at a later point.

Celvin Davies (NPTCBC Environmental Health)

- The point I was trying to raise it probably goes beyond permitted operations.
- We need to understand what is contributing to PM_{10} and nuisance dust.
- We currently don't have any way of drilling down and understanding what's happening there.

- We are interested in creating an action around that and also, we would need input from businesses in that area who may be in this call .

Abigail Pepler (Ricardo) - In response to the chat box message from Paul

- Looking at source apportionment of stack vs fugitive emissions, I don't know how easy it will be to look at fugitive emissions specifically (unlike measured emissions from permitted point sources).

Paul Callow (UKHSA)

- It would be useful to know if there is a pollution inventory.
- The nature of the area is extremely well monitored for a UK site, so hopefully that will make the role a bit easier.
- It obviously gives an indication of where to concentrate efforts in the action plan.

Abigail Pepler (Ricardo)

- Potentially an action to consider in the AQAP a research exercise to better understand and register and attempt to quantify all the fugitive emissions in the area?

4.3 Discussion – Domestic Measures

Amber Horton (Public Health Wales) – Regarding domestic fuel policy

- Need to be mindful of unintended consequences of fuel poverty and where people are sourcing their fuel due to current economic and cost of living crisis.

Paul Callow (UKHSA)

- Worth reflecting decarbonisation agenda in action plan.
- Moving away from gas combustion for primary heating.
- Mindful of emerging evidence around eco-design stoves not being all its promised.
- May be smokeless but still a substantial source of $PM_{2.5}$ in urban areas.

Abigail Pepler (Ricardo)

- Is there an action to be taken to explore whether there is funding or grants that can be looked into addressing fuel poverty together with improving energy efficiency and the amount of carbon and particulates that are coming from domestic heating and fuel?
- Which branch of council would this come under?

Paul Callow (UKHSA)

- Who doesn't want lower cost heat with no pollution at point of use?

Celvin Davies (NPTCBC Environmental Health)

- I'm not sure if there's a particular section of council looking at this.
- We do have the decarbonisation section, who can be passed this question.
- As a part of the new Clean Air bill Wales (renamed) there is a part that looks at domestic burning, this suggests some measures and approved stoves and solid fuels .
- This would include moisture content of wood.
- There is a big piece of work around domestic emissions coming from primary legislation that's coming into Wales, it may be worth capturing that here.
- As a part of this process, there's impact assessment that need to be undertaken by Welsh government.
- The issue Amber rose about fuel poverty and Neath Port Talbot area has solid fuel appliances. These have been considered from a policy point of view. Welsh government can provide more information. The new legalisation will include this.

4.3.1 Chat Box Discussion – Domestic Measures

[15:13] Nathan Ace (Tata Steel)

I believe log burning stoves etc was a point of discussion at a recent JCG meeting held – is this included?

[15:18] Amber Horton (Public Health Wales)

Again, to mention active travel and reducing car use comes under domestic. Linking with decarbonisation plans.

[15:18] Leah Morgan (NPTCBC Environmental Health)

Just to say that a representative from the decarbonisation team was invited but unable to attend today. They have asked to be kept in the loop and we will ask them this.

Yes Nathan, this will form part of this piece of work and is likely to be reviewed in light of the bill that Celvin just mentioned.

4.4 Discussion – Transport Measures

Laura Pack (NPTCBC Active Travel)

- The local cycling and walking infrastructure plan, will come under active travel network plans. This is already in place in Neath Port Talbot
- We have existing routes and future routes which are prioritised into short-, medium- and long-term.
- We have funding associated to that. So that infrastructure plan is already taking place.

Amber Horton (Public Health Wales)

- In terms of electric vehicles; big fleets and organisations moving to electric vehicles is a positive however, they are not the answer for everyone.
- In terms of general population, we need more of a modal shift to active travel, rather than incentivising people to change car use from petrol/diesel to electric vehicles.
- They're heavier, and they can do more damage in terms of road traffic collisions, tyre wear and therefore have the potential to increase PM.
- Modal shift interventions should include active travel and public transport considerations in the broadest possible sense.

Sarah Foll (Ricardo)

- Paul asked in the chat where would site mobile plant emissions come in. So, is that in regard to non-road mobile machinery type? That's usually covered under its own regulations.

- I think we consider those under industrial section, depending on what it is and what guidance it comes under. It's a good point to raise that we should think about that too.

Abigail Pepler (Ricardo)

- There is a section in the AQAP that will measures which have been completed, so, please do mention those to us for inclusion.
- Is anyone from transport on the line, if so, could you expand on what the planned improvements are to bus and rail?

Laura Pack (NPTCBC Active Travel)

- There are some actions happening regionally, but it might be worth including the passenger transport people into this meeting.

Leah Morgan (NPTCBC Environmental Health)

- They were invited but unable to attend.

Abigail Pepler (Ricardo)

- Can follow up with public transport officers over email.

4.4.1 Chat Box Discussion – Transport Measures

[15:22] Paul Callow (UKHSA)

Where would site mobile plant emissions come in? Fugitive industrial?

[15:22] Richard Jones

Environmental speed management area on the M4 which passes through this area.

[15:22] Laura Pack (NPTCBC Active Travel)

www.npt.gov.uk/activetravel

https://mapdata.llyw.cymru/maps/active-travel-network-maps/

7. Discussion – Communication, Policy and Other Measures

Laura Pack (NPTCBC Active Travel)

- We have funding to look at communications from an active travel perspective, whether we want to potentially link with air quality, just an idea.

- Maybe we could discuss further internally, it seems to link.

7. Chat Box Discussion – Communication, Policy and Other Measures

[15:29] Paul Callow (UKHSA)

With regard to Wildfires – NPT could join/link with Operation Dawn Glaw?

5. Next Steps

- Steering group members to feedback over email or phone call any measures missed or new measures planned that should be included in the AQAP.
- Ricardo to distribute workshop slides and meeting minutes.
- Ricardo will work with the council to explore any additional measures and refine long-list of measures to produce a short-list (by end of August 2023).
- Distribution of draft action plan to Steering group (end of September 2023).
- Consultation on draft action plan.
- Finalisation of action plan following consultation.

If there is anyone else who should be included to the Steering Group that wasn't invited, please advise so they can be contacted, and brought up to date.

6 Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQO	Air Quality Objective
AQS	Air Quality Strategy
APR	Air quality Annual Progress Report
B[a]P	Benzo[a]Pyrene, a pollutant belonging to the group polycyclic aromatic hydrocarbons (PAHs), formed during the combustion of fuels such as coal and oil at high temperatures. B[a]P is often used as a proxy for PAHs as a group, as it is considered to make the greatest contributions to the health risks caused by exposure to PAHs.
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
IPPC	Integrated Pollution Prevention and Control
LAQM	Local Air Quality Management
LDP	Local Development Pan

LTP	Local Transport Plan
NAEI	National Atmospheric Emissions Inventory
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NPT	Neath Port Talbot
NPTCBC	Neath Port Talbot County Borough Council
NRW	Natural Resources Wales
PAH	Polycyclic aromatic hydrocarbon. PAHs comprise a large group of compounds consisting of hydrocarbons containing two or more benzene rings fused together or to other hydrocarbon rings.
PCM	Pollution Climate Mapping. A collection of models designed to fulfil part of the UK's EU Directive (2008/50/EC) requirements to report on the concentrations of particular pollutants in the atmosphere. These models are run by Ricardo Energy & Environment on behalf of Defra. There is one model per pollutant (NOx, NO2, PM10, PM2.5, SO2, CO, benzene, ozone, As, Cd, Ni, Pb and B[a]p) each with two parts: a base year model and a projections model. The PCM provides outputs on a 1x1 km grid of background conditions plus around 9,000 representative road side values.[35]
PDR	Peripheral Distributor Road
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less

[35] https://uk-air.defra.gov.uk/research/air-quality-modelling?view=modelling

$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
RLDP	Replacement Local Development Plan
STAP	Short Term Action Plan. The Welsh Government led action plan "Clean Air for Port Talbot: Short Term Action Plan 2012", containing short term measures to be taken within the Neath Port Talbot area to reduce the risk of the daily PM_{10} limit value or alert threshold being exceeded, and where not possible to prevent the occurrence, to limit its duration or severity. [36]
WG	Welsh Government
WHO	World Health Organisation

[36] https://www.gov.wales/sites/default/files/publications/2019-04/clean-air-for-port-talbot-short-term-action-plan-2012.pdf

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