Agenda
Economy Skills Transport and Environment Scrutiny Board

25th March 2021 at 5.30pm

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This agenda gives notice of items to be considered in private as required by Regulations 5 (4) and (5) of The Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012.

1 **Apologies for Absence**

2 **Members to declare any interests in matters to be discussed at the meeting**

3 **To confirm the minutes of the meeting held on 4 February 2021 as a correct record**

4 **Urgent Item of Business - To determine whether there are any additional items of business which, by reason of special circumstances, the Chair decides should be considered at the meeting as a matter of urgency**

5 **Air Quality Action Plan**
To consider a report relating to the Air Quality Action Plan

6 **Climate Change Implementation**
To receive a presentation on Climate Change Implementation

Date of next meeting: TBC

D Stevens
Chief Executive
Sandwell Council House
Freeth Street
Oldbury
West Midlands

Distribution
Councillor Rollins (Chair)
Councillors Chidley, Eaves, L Giles, Hackett, M Hussain, Sandars and Worsey.

Contact: democratic_services@sandwell.gov.uk

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Economy Skills Transport and Environment Scrutiny Board

Apologies for Absence

The Board will receive any apologies for absence from the members of the Board.

Economy Skills Transport and Environment Scrutiny Board

Declarations of Interests

Members to declare:-

(a) any interest in matters to be discussed at the meeting;

(b) the existence and nature of any political Party Whip on any matter to be considered at the meeting.

Minutes of
Economy Skills Transport and Environment Scrutiny Board

4th February 2021 at 5:30pm
Online virtual meeting

Present: Councillor Rollins (Chair);
Councillors Chidley, Eaves, M Hussain.

Also present: Simon Hall, Interim Growth and Spatial Planning Service Manager;
Tammy Stokes, Interim Director Regeneration and Growth.

01/21 **Apologies for Absence**

Apologies for absence were received from Councillor L Giles.

02/21 **Declarations of Interest**

There were no declarations of interest.

03/21 **Minutes**

The minutes of the meeting held on 19 November 2020 were agreed as a correct record.

04/21 **Urgent Items of Business**

There were no additional items of business to consider.

05/21 **Reset and Recovery – Update Presentation**

The Interim Director of Neighbourhoods provided an update on the work of the Business Growth Team and the Planning Regeneration Team.

The Interim Service Manager presented the Reset and Recovery Update on the approaches and activities utilised over the last few months to address the impacts of Covid-19 and support Sandwell's businesses.

Business Growth Team:

Grants and Funding Schemes-

The team prioritised the following activities:

- Providing support to business through the distribution of discretionary grants and other business support funding schemes.
- The Board noted that under the first national lockdown, £2.9m was distributed to 315 businesses, and £96k was provided to market traders.
- The Board acknowledged that under the second national lockdown (November 2020), different grants regimes were introduced by the government. £629k of Additional Restrictions Grant were provided to support 554 businesses. This grant sought to provide support to those who had not been eligible for other grant regimes.
- Schemes such as AIM for Gold business growth programme grants and the Black Country Small Grants were utilised to distribute funding.

Signposting and Advice-

The team were focused on the following activities:

- Advising and signposting businesses to partner services, who provided specialist support, such as the Black Country Growth Hub and Department for International Trade.
- Working with organisations such as Skills Work and Enterprise Development Agency (SWEDA) to support business start-ups.
- Utilising economic intelligence to remain updated with the current situation.
- Working with workshops hosted by partner organisations, such as the Chamber of Commerce and the Federation of Small Businesses, to keep updated with the current situation and to provide continued and informed support to businesses.

Communication with the Business Community-

The team were focused on the following approaches:

- Utilising Sandwell Business Ambassadors to communicate effectively with the wider business community to ensure engagement and understanding of the Council's approaches and activities, advocate on behalf of other businesses, and support the Council's plans.
- Actively using Think Sandwell Business Support Website, Made in Sandwell Magazine and Social Media to facilitate the communication of key messages and deliver positive stories across the business community.
- Reviewing the potential projects Sandwell Council could offer to support businesses, with a focus on what response would be most beneficial to businesses and partners.
- Creating a link between growth plans and existing strategies, in terms of inclusive economy deals, social value and community wealth building. This enabled an understanding on how to best implement these processes in a simple but coherent manner.

Employment and Skills-

The team collaborated with the Employment and Skills team on the following:

- Securing employment opportunities, in light of the furlough scheme, closure of businesses and the difficulty that young/mature people experienced in accessing job opportunities.
- Working alongside businesses to ensure they were aware of the Community Benefit Clauses and the benefits of providing social value and creating jobs.
- Understanding how to attract local and national businesses into Sandwell. This presented opportunities for the local community, businesses, and employment.
- Understanding how to encourage businesses to invest in Sandwell, Black Country and West Midlands.

Supporting Local Supply Chains to Secure Procurement Opportunities-

The team prioritised the following activities:

- Arranging ‘meet the buyer’ events, procurement clusters around industries such as construction and retail, and networking opportunities to ensure that peers can provide advice to one another and build a buying community.
- Measuring the local spend to support the community to enhance procurement opportunities within the borough.

The Planning Regeneration Team:

Town Investment Plans-
The Plans focused on the following:

- Sandwell Council were invited to bid for three town fund applications, namely for West Bromwich, Rowley Regis, Smethwick.
- If all three bids are successful, this would bring up to £25m per town. This could give a total investment of £75m to be used across Sandwell.
- £750,000 per town was awarded through Accelerated Funding.

Town Investment Plan Priorities-
The team prioritised the following proposals:

- Reinvigorating the town centre, which in turn would benefit the community.
- Investing in a new hospital, aquatics centre, and the Commonwealth Games.
- Aiding regeneration to enhance future opportunities.
- Regenerating local assets.
- Focusing on connectivity to ensure that Sandwell could access digital communities.
- The creation of inclusive town centres that present a range of opportunities for the community.
- Collaborating with and supporting young people in terms of skills and employment.
- The creation of more housing.

Accelerated Funding-
The team prioritised the following projects:

- Enhancing connectivity across the borough.
- Redeveloping the market and approving the cycling and walking infrastructure in West Bromwich.
- Creating pedestrian and cyclist connectivity and improving outdoor spaces in Rowley Regis.
- Approving the cycle and walking scheme to create accessibility and job opportunities in Smethwick.

Priority Regeneration Projects-
The project focused on the following:

- In Wednesbury, Friar Park would create 700+ new homes in partnership with the West Midlands Combined Authority. The Wednesbury Heritage Action Zone would build on the current heritage community to enhance engagement.
- The West Bromwich Masterplan focused on the redevelopment of the town. The Planning Statement would set out Sandwell's ambitions and how they would be delivered. The Towns Fund Programme and development of future high streets would be a part of this process.
- In Smethwick, the masterplan would present the opportunities that the framework will generate, such as the creation of more homes, primary schools, and more job

opportunities. The Towns Fund and Rolfe Street would also be a part of this project.

- There would be a focus on the creation of new homes, job opportunities, and development of new green spaces in Oldbury.

The team was focused on supporting the survival, resilience, and growth of the local economy by recognising the impact and challenges of Covid-19, and taking the necessary steps through working with stakeholders, businesses, residents and communities, to ensure that the economy is withstanding post Covid-19.

The Board noted the following comments and responses to questions:

- It was difficult to ascertain exactly how many eligible businesses had received support, as the team were uncertain how many businesses were still operating. However, over 50% of businesses contacted by the Council had received the grant. Applications for the grants were still being received and the team were actively distributing the grant, therefore this figure was likely to rise.
- There were difficulties in determining the turn-around time for applying for the grant. The team recognised the urgency of the situation, therefore was working to meet demand as efficiently as possible and aimed to approve applications within a month.
- Meetings with partnership organisations were arranged to identify what businesses understand about the Council's plans within Sandwell. Partnership organisations recognised the significance of Community Wealth Funding, however challenges with finances and furlough had caused issues with how businesses were responding.
- The Town Investment Plan was reviewed and amended to ensure it remained viable and reflective of the most current situation with Covid-19.
- Under the Rowley Regis Town Investment Plan, although complete pedestrianisation would not be viable, there were

proposals to make Blackheath Town Centre a safer and more suitable environment for cyclists and pedestrians, which would reduce pollution. In turn, this would complement the agenda for Climate Change in Sandwell. There were no proposals in place to pedestrianise Oldbury Town Centre, however there were plans for sustainable transport in Oldbury.

- Councillor Chidley to be sent the Cycling and Walking Infrastructure Plan report for more information on these proposals.
- The Board acknowledged that economic recovery would involve engaging in both economic and environmental activity. Economic recovery plans would need to be planned in consideration of Sandwell's climate change plan.
- In terms of bus provision, it was noted that this was under the management of bus providers and Transport West Midlands, it was anticipated that there would be investment in zero-carbon buses in the imminent future.
- Information regarding when buses were to become electric in Sandwell would be sent to Councillor Chidley.

The Chair expressed her gratitude, on behalf of the Board, to all those involved in supporting businesses in Sandwell and for adapting their way working during this time.

The Board noted that the Climate Change Working Group would continue to consider and review the Town Investment Plans moving forward.

Meeting ended at 6:00pm.

Contact: democratic_services@sandwell.gov.uk

Item 5

Report to Economy, Skills, Transport and Environment Scrutiny Board

4 March 2021

Subject:	Sandwell's Air Quality Action Plan
Director:	Director of Public Health, Lisa McNally
Contact Officer:	Consultant in Public Health, Paul Fisher paul_fisher@sandwell.gov.uk Healthy Urban Development Officer, Andy Thorpe, andy_thorpe@sandwell.gov.uk

1 Recommendations

1.1 To consider and comment on the following recommendations in the report to Cabinet about Sandwell's Air Quality Action Plan:

- That the Cabinet recommend the Council to approve Sandwell's Air Quality Action Plan (AQAP) 2020-2025.

- That the Director of Public Health be authorised to address air quality according to the actions outlined in the Air Quality Action Plan (AQAP) following approval by the Council.

2 Reasons for Recommendations

2.1 Tackling air pollution is one of Sandwell Council's health priorities and the AQAP outlines the actions delivered between 2020 and 2025 to reduce concentrations of air pollutants and exposure to them.

2.2 Once approved, the programme of work outlined in the AQAP will also help to reduce carbon emissions to a level which will meet Sandwell's 2030 and 2041 targets as set out in the recently adopted Climate Change Strategy and associated action plan. Many of the actions to reduce air pollution can also result in lower carbon emissions. The impacts of climate change are likely to be extensive and will detrimentally affect poorer people, therefore action must be taken to reduce that impact and ensure the future prosperity and equality of Sandwell's residents.

2.3 The wide-ranging actions required to tackle the impacts of air quality and climate change will have significant resource implications for the Council, therefore funding and likely sources of income will be sought to assist.

3 How does this deliver objectives of the Corporate Plan? (select relevant category and inc narrative how deliver)

	Best start in life for children and young people Young children are at particular risk of emissions in the borough, both short-term (air quality) and longer-term (climate change).
	People live well and age well Air pollution and climate change are key threats to the health of our population and a driver of health inequalities. Addressing air pollution and climate change will reduce health inequalities and increase the perception of Sandwell as a clean, safe borough.
	Strong resilient communities Addressing air pollution will contribute towards adaptation and resilience to the impacts of climate change.
	Quality homes in thriving neighbourhoods

	Reduced emissions from Sandwell's new and existing housing stock will help to address air pollution, climate change and fuel poverty problems.
	A strong and inclusive economy Sandwell's reputation will be increasingly linked to its action on climate change and clean air, which will be important for attracting investment in green jobs.
	A connected and accessible Sandwell Improved, cleaner public transport will have a significant impact on reducing air pollution and carbon emissions. Developing more walkable and cyclable places will reduce air pollution and carbon emissions, producing more desirable places to live.

4 Context and Key Issues

4.1 The AQAP is produced as part of the Council's statutory duty to work towards Air Quality Strategy (AQS) objectives as required by The Environment Act 1995 (Part IV) and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

4.2 Air pollution has been a longstanding problem in Sandwell and in 2005 the Council declared a borough wide Air Quality Management Area (AQMA). At that time the objective for Nitrogen Dioxide (NO2) was being exceeded in 22 separate locations. The Council's monitoring of NO2 concentrations shows that they continue to exceed the annual mean objective in 7 locations with no significant evidence of a downward trend during the past five years.

4.3 Screening exercises in 2018 were also utilised to validate existing hot spots for NO2 and was also used to identify other areas where NO2 levels might rise above annual mean objectives.

4.4 Projects delivered through the last AQAP included:

- Promoting health initiatives that support sustainable transport and behavioural change
- Traffic management and highway improvements
- Implementation of guidance and policy working with other key stakeholders
- Improving understanding of pollutant behaviour
- Reviewing the Council's impact on air quality.

4.5 The Council's approach to tackling air quality has now become integrated with the Council's Climate Change Strategy because the emissions that pollute the air and those that warm the planet have common sources; vehicles, buildings, power generation and industry.

The Current Position

4.6 The principal source of air pollution in Sandwell is vehicle exhaust emissions, particularly from diesel engines. The Council's aims are to:

- Reduce the overall health impacts and burdens of poor air quality
- Achieve the national air quality NO2 annual mean objective across the borough in the shortest possible time frame
- Reduce concentrations of particulate matter emissions (PM10 and PM2.5 inhalable particles) to protect human health.

4.7 Seven priority actions have been established to support these aims:

1. Develop specific measures with local communities to reduce NO2 hotspots.
2. Promote public transport, walking, cycling and switching to zero emission vehicles.
3. Review the Council's impact on air quality including Council fleet and employee vehicles.
4. Support and encourage taxi drivers to switch to low emission vehicles.
5. Apply existing and adapt new planning development policies to support air quality improvements.

6. Publicity campaigns to encourage behavioural change around physical health and increasing use of low emission vehicles.
7. Partnership working with Birmingham City Council to minimise potential negative impact of the Clean Air Zone.

Consultation

4.8 A consultation on the Climate Change Strategy was carried out in parallel with the draft AQAP for six weeks from 20 January to 15 March 2020. This formed the local consultation for the AQAP. A second period of consultation for the AQAP was carried out between 7 July and 1 September 2020. This formed the statutory consultation of key stakeholders and interest groups which is required when local authorities are either preparing or revising their AQAP.

4.9 The former Air Quality Working Group has become the Climate Change Working Group enabling focus on a wider agenda. A Members' Steering Group for Climate Change also meets regularly.

5 Alternative Options

5.1 The Council has a statutory duty to have an AQAP so there are no alternative options. (There is not the same requirement for a Climate Change Strategy but given the importance of the situation there also does not seem an alternative approach to having adopted it.)

6 Implications

Resources:	Financial, staffing, land/building implications No specific budget has been identified for the implementation of AQAP measures requiring additional funding, but these will be the subject of future reports to Cabinet. Likely sources of funding and income will also be sought to assist. Council resources which might be dedicated to funding climate change interventions, needed to achieve the required step change in behaviour, will in most cases help to address

	air quality problems. Work has begun to identify how the Climate Change Strategy can be funded.
Legal and Governance:	Legal implications including regulations/law under which proposals are required/permitted and constitutional provisions The AQAP is produced as part of the Council's statutory duty to work towards Air Quality Strategy (AQS) objectives as required by The Environment Act 1995 (Part IV) and to meet the requirements of the Local Air Quality Management (LAQM) statutory process. The Council is also required to update the air quality action plan and implement it as part of these statutory duties.
Risk:	Risk implications, including any mitigating measures planned/taken, health and safety, insurance implications The Environment Bill, which is currently progressing through Parliament, is likely to set lower thresholds for particulate matter emissions (referred to as pm2.5) because of the health risks associated with this pollution entering the bloodstream through the lungs and therefore being taken to all bodily organs. This could result in the need to apply restrictions which will reduce the exposure of people to such pollution and might therefore have implications for new development schemes. The Council is required to update the air quality action plan and implement it as part of its statutory duties. The risk is not taking any action and allowing mortality rates to increase due to poor air quality. The AQAP would be supported by a risk register to identify and assess the key risks that will need to be managed in order to ensure the successful delivery of the AQAP. This would also assist in the allocation of finite resources to the AQAP. Risks would include matters such as: 1. Programme/project governance arrangements 2. Financial resources to deliver the AQAP actions

	3. Performance and assurance framework to assess effectiveness of actions included in the AQAP 4. Communication and stakeholder buy-in of the AQAP 5. Alignment of the AQAP to other council documents and processes, eg procurement rules, cabinet reports, planning policies, office accommodation plan, etc.
Equality:	Implications for equality (all aspects and characteristics) including how meeting Equality Duty, equality impact assessments The worst air pollution levels were seen in ethnically diverse neighbourhoods. Elderly, young and deprived people are more vulnerable to the effects of air pollution.
Health and Wellbeing:	Implications of the proposals on health and wellbeing of our communities 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, plus recent research has suggested links between air quality and both cognitive and sight health. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also a strong correlation with equality issues, because areas with poor air quality are also often the less affluent areas. The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion. Sandwell Council is committed to reducing the exposure of people to poor air quality in order to improve health.
Social Value	Implications for social value and how the proposals are meeting this (for e.g. employment of local traders, young people) In the long term, proactive intervention taken now to improve air quality should reduce the burden on the NHS and local health care services and help ensure health equality.

7. Appendices

Appendix 1: Sandwell's Air Quality Action Plan 2020-25
Appendix 2: Sandwell's Climate Change Strategy 2020-41

8. Background Papers

None

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Sandwell Metropolitan Borough Council
Air Quality Action Plan 2020 – 2025

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management

September 2020

Local Authority Officer	Andy Thorpe
Department	Public Health Directorate
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Report Reference number	PH/AQAP/2020
Date	September 2020

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Sandwell between 2020 and 2025

This action plan replaces the previous action plan which ran from 2009 to 2020. Projects delivered through the past action plan included actions in five key areas to reduce air pollution arising from vehicle emissions; these are shown in Table 1 below with examples of actions already implemented.

Table 1 – Actions already undertaken to tackle poor air quality

Key areas	Actions
1. Promoting health initiatives that support sustainable transport and behavioural change	> Walking, cycling and public transport schemes. > Adoption of the West Midlands Cycling Charter to achieve improved walking and cycling uptake across the borough
2. Traffic management and highway improvements.	> Motorway and strategic road network traffic control measures to monitor and coordinate traffic movement and disseminate 'live' travel information. > Improved incident response times. > Motorway active traffic management, to prevent and manage congestion and ramp metering to coordinate traffic joining the motorway. > Red routes on arterial roads to impose strict controls on stopping and parking.
3. Implementation of guidance and policy, working in partnership with key stakeholders to improve air quality outcomes.	> Adoption of policies and guidance to encourage the shift towards sustainable modes of travel and low emission vehicles. > Co-ordinating air quality activities across the West Midlands, through the WMLETCP (West Midlands Low Emission Towns and City Project) and the West Midlands Combined Authority (WCA).
4. Improving understanding of pollutant behaviour particularly at hot spot locations.	> Regional and local source apportionment and technical feasibility studies have been undertaken to investigate and test air pollution dispersion models
5. Reviewing the council's impact on air quality through an assessment of its vehicle fleets.	> The council has organised low emission vehicle trials and employee demonstration days to promote the use of ultra-low emission both private and commercial vehicles.

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]. Sandwell Council is committed to reducing the exposure of people in Council to poor air quality in order to improve health.

Our priorities are considered under 7 broad headings:

- Developing specific measures in consultation with communities to reduce NO_2 concentrations at “hot spot” locations.
- Promoting public transport, walking, cycling, car sharing and switching to low or zero emission vehicles.
- Reviewing what impact the council has on air quality in its role of as a provider of public services and develop a plan to reduce emissions from its activities. This will include reducing emissions from council fleet and employee vehicles.
- Supporting and encourage taxi and private hire vehicle operators and drivers in reducing emissions from vehicles.
- Applying existing and developing new planning development policies that support air quality improvements.
- Developing information, social media and campaigns to encourage behaviour change around improving physical health and increasing use of low emission vehicles.
- Working in partnership with Birmingham City Council to minimise any negative impacts on Sandwell residents resulting from the implementation of the Clean Air Zone (CAZ).

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are many 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

[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

and central government on policies and issues beyond Sandwell Council's direct influence.

Responsibilities and Commitment

This AQAP was prepared by the Pollution Control Team of the Public Health Directorate of Sandwell Council with the support and agreement of the following officers and departments:

Pollution Control team – Public Health Directorate
Research and Intelligence team – Public Health Directorate
Transportation Planning team – Regeneration and Economy Directorate
Development Management – Regeneration and Economy Directorate
Licensing – Regulated Services team, Protection and Prevention Directorate
Fleet Services – Neighbourhoods Directorate

This AQAP has been approved by:

Councillor Yvonne Davies – Leader of the Council
Councillor Faruk Shaeen - Cabinet Member for Living Healthy Lives
David Stevens – Chief Executive
Dr Lisa McNally - Director of Public Health
Dr Alison Knight Executive Director – Neighbourhoods

This AQAP will be subject to an annual review, appraisal of progress and reporting to the relevant Cabinet Members. Progress each year will be reported in the Annual Status Reports (ASRs) produced as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Andy Thorpe at:

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1 Table of Contents

List of Tables

This report outlines the actions that Sandwell Council will deliver between 2020 and 2025 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 Sandwell Council's administrative area.

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 Sandwell Council's Air Quality Annual Screening Report (ASR).

2 Summary of Current Air Quality in the Metropolitan Borough of Sandwell

The Borough of Sandwell is characterised by large areas of established industry and a complex road network of major arterial roads, including the M5 and M6 motorways, which are amongst the most utilised and congested roads in Europe. Air pollution has been a longstanding problem in Sandwell and in 2005 the Council declared a borough wide Air Quality Management Area (AQMA). At that time the objective for Nitrogen Dioxide (NO_2) annual mean was being exceeded in 22 separate locations.

By 2018 the following areas, which had originally exceeded the annual mean NO_2 objective, were found to be compliant.

Table 2.1 Areas now compliant with NO_2 annual mean objective

Area	Area description
2	Area to North of the M6 – Yew Tree Estate (Inc. Woodruff Way, Snapdragon Drive and Pimpernel Drive
3	Area to North of M6 Junction 8 – Wilderness Lane and Birmingham Road – Great
4	Area to South of M6 Junction 8 (Inc. Longleat Cl, Rigley Dr and Himley Cl–Great
5	Area to Southeast of M6 Junction 7 (Inc. Scott Rd and Birmingham Rd) - Great
6	Area to Southwest of M6 Junction 7 (Birmingham Road and Hillside Road) –
7	Oldbury Ringway / Birmingham Road (A457), Oldbury
8	Dudley Road East / Roway Lane (A457), Oldbury
9	Area surrounding the M6/M5, Junctions 7- 8 Great Barr and 1-2 West Bromwich
12	Oldbury Road / Birmingham Road, Blackheath
14	Bromford Lane (including the Kelvin Way / Brandon Way Junction), West
16	All Saints Way / Expressway, West Bromwich
17	All Saints Way / Newton Road, West Bromwich
18	Soho Way / Grove Lane / Cranford Street, Smethwick
19	Horseley Heath, Tipton
20	Sedgley Road East /Dudley Port – Tipton
21	Myvod Road / Wood Green Road – Wednesbury
22	Gorsty Hill, Blackheath

The NO_2 levels recorded at the Gorsty Hill levels were only marginally under the annual mean objective in 2018 and will therefore remain a priority area until NO_2 levels are consistently below the objective level. Exceedances were also identified in two locations not originally included in the 22 exceedance areas. These are at Mallin Street, Smethwick and at Burnt Tree Junction/Birmingham New Road, Oldbury. There are currently no relevant receptors at the Burnt Tree Junction monitoring location but there may be in the future. The Council will continue to monitor air quality at key locations to confirm the trends in pollutant concentrations and compliance with published objectives.

In addition to this work, Sandwell was required under a Ministerial Direction issued on the 23 March 2018 to undertake feasibility studies into reducing NO_2 concentration in the shortest practicable time at four locations. The feasibility studies were undertaken by a consultant working jointly with Sandwell Council and the other Black Country Authorities. Bus retrofitting was identified as a solution for the A457 in Oldbury and on the A41 at West Bromwich a combination of bus retrofitting and signal improvements were selected for implementation.

A further Direction was issued in 25 March 2019 for two road links on a section of the A41 between Junction 1 of the M5 motorway. The feasibility studies concluded that there were no physical interventions that could be implemented to ensure compliance with air quality objectives within a short time frame.

Sandwell maintains an extensive monitoring network and has undertaken 12 months of continuous automatic monitoring at six locations. Figures C1 and C2 (in Appendix C) show the trend in NO_2 and PM_{10} concentrations respectively from 2008 to 2018. The council also deployed individual diffusion tubes at 99 locations in 2017 and 103 locations in 2018. In 2019 this increased to a total of 163 diffusion tubes at 123 locations.

Sandwell confirms compliance with the following pollutant objectives: Benzene, 1-3 Butadiene, Sulphur Dioxide, Carbon Monoxide, Particulate Matter (PM_{10}) and Lead. National air quality objectives for PM_{10} are currently met in Sandwell. It is recognised there is lack of evidence to indicate there is a concentration of particulate matter below which health effects do not occur and therefore our aim is to achieve a reduction in the overall exposure of the population. $PM_{2.5}$ is currently monitored in one location.

The latest Annual Status Report produced by Sandwell Council is available at: http://www.sandwell.gov.uk/info/200274/pollution/485/air_quality

2.1 Sandwell's Key Priority Zones for 2020 – 2025

Nitrogen dioxide concentrations at seven of the original 22 exceedance areas continue to exceed the annual mean objective. Exceedances in these seven zones, shown in Figure 2.1, have been persistent, demonstrating no significant evidence of a downward trend during the previous five years.

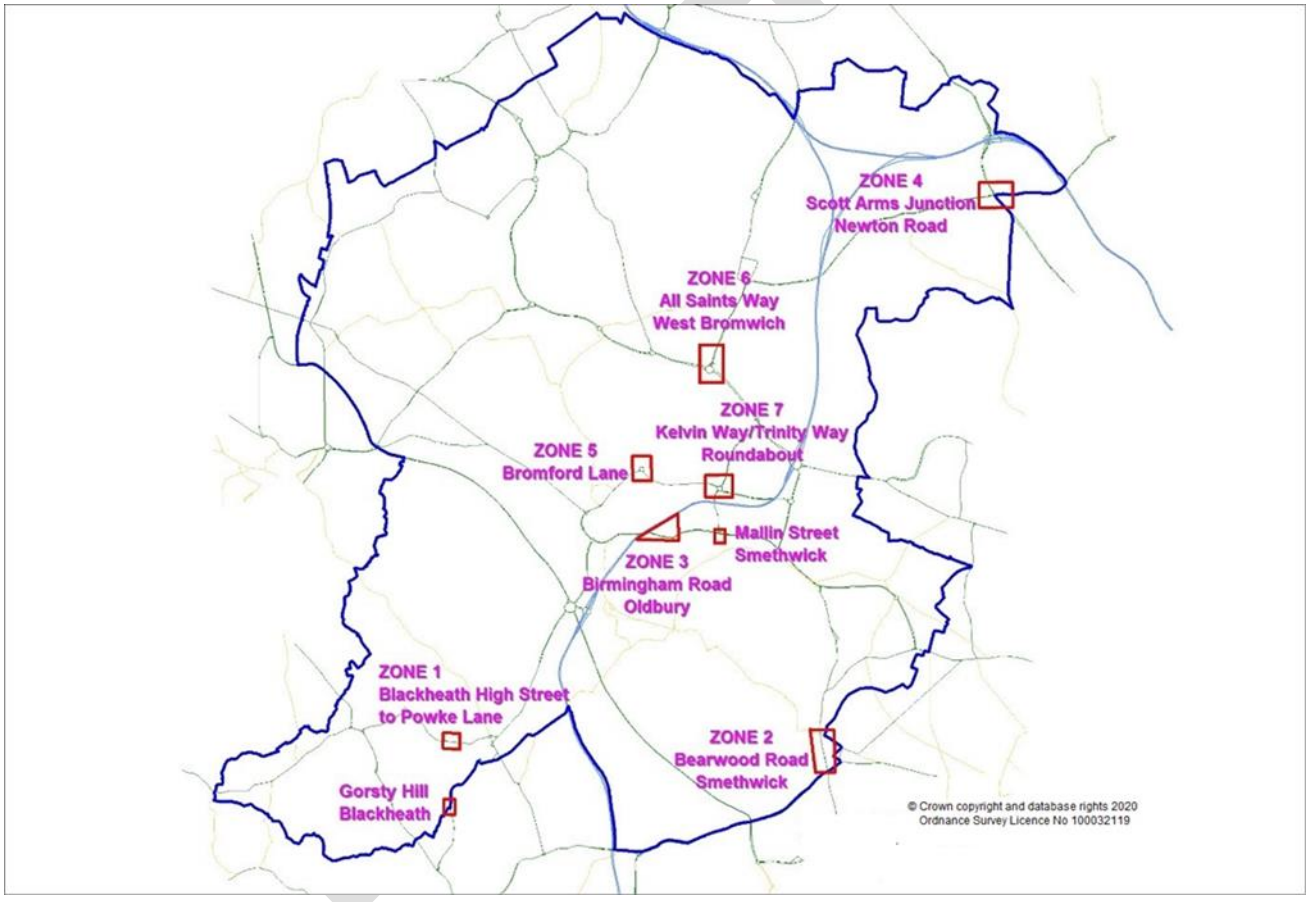


Figure 2.1 Key Priority Zones and Individual Hotspots

Table 2.2 sets out the locations of these areas and the measures that have been taken or are in progress to reduce NO_2 concentrations.

Table 2.2 Priority Zones and Hot Spots	
Location	**Actions completed or on-going**
Zone 1 Blackheath High Street/Powke Lane	• Blackheath by pass • Red route scheme • Traffic management scheme to maximise use of bypass
Zone 2 Bearwood Road	• Technical feasibility study producing contour map of NO_2 levels and forecast air quality impacts and improvements of low emission strategies and scenarios. • Red route scheme Hagley Road • Traffic signal upgrade at junction of Sandon Road/Bearwood Road to reduce vehicle waiting times and increase efficiency of pedestrian crossing points.
Zone 3 Birmingham Road	• A457 Red Route scheme • Lane improvements implemented as part of the Oldbury viaduct works
Zone 4 Scott Arms Great Barr	• Bus Route 51 - improvements to traffic flows and reduce queues • Bus showcase and service improvements to improve customer experience and patronage • Red Route scheme • Improved traffic signal timings because of Oldbury Viaduct repairs.
Zone 5 Bromford Lane West Bromwich	• Red route scheme • Bus improvements – upgrade to bus infrastructure to improve customer experience and patronage. • 20 mph speed limit West Bromwich Town Centre • Cycle route around Bromford Road roundabout and kelvin Way approach arm.
Zone 6 All Saints Way West Bromwich	• New underpass and major roundabout improvements to Express Way (A41 at Cronehills Linkway). • Red Route Scheme • Bus Service Improvements and Bus Showcase – upgrade to bus infrastructure to improve customer experience and patronage. • Segregated cycle route between A41 roundabout and Gladstone Street on both sides of dual carriage way linked by Toucan crossing
Zone 7 Kelvin Way/Trinity Way West Bromwich	• Red route scheme • Improvements to roundabout 2018
Individual hot spot Mallin Street Smethwick	• To be determined
Individual hot spot Gorsty Hill Blackheath	• To be determined

2.2 Borough screening exercise

In 2018 additional screening work was undertaken to validate the hot spots already identified and consider whether there are any other areas where NO_2 levels are likely

to exceed the national objective. The screening exercise for NO_2 has identified several areas of 'possible', 'likely', or 'very likely' exceedances in 2016. In many cases a trend can be seen that the possibility for exceedances extends beyond the 'hot spot' locations that had been previously identified.

This is an important consideration that affects not only the interpretation of this data, but also to inform any interventions, as it demonstrates how traffic does not suddenly arise in hotspot locations but tends to follow routes through the Borough subject to the origin and destination and focusing on major thoroughfares. It is it is likely that the same vehicles will affect more than more hotspot, and it is the 'journey' that should be recognised rather each discrete location.

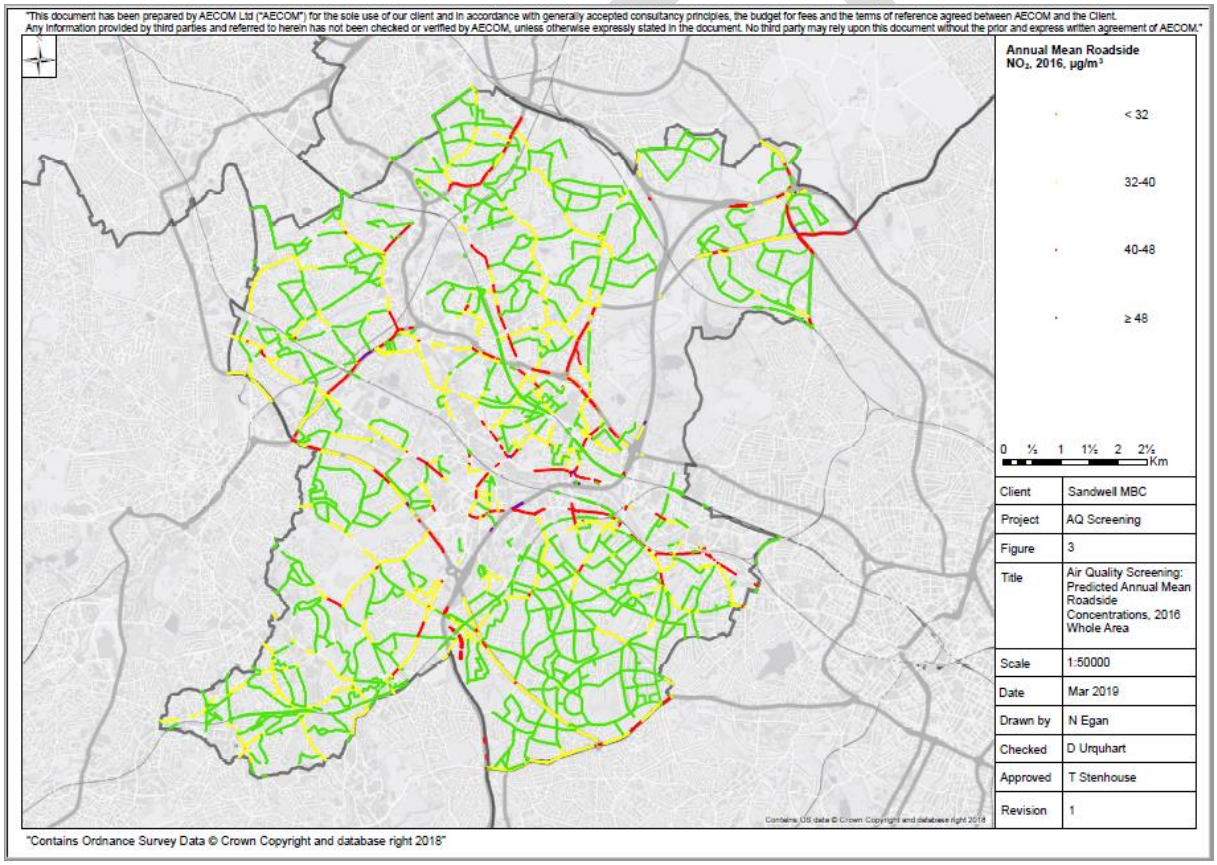


Figure 2.2 Predicted annual mean roadside concentrations of NO_2 for 2016

Key: (μgm^{-3}) --- < 32 --- 32-40 --- 40-48 ---≥ 48

It is intended to refine the model outputs by using Automatic Number Plate Recognition data to assign an accurate local fleet and concurrent emissions profile. This may be used to undertake source apportionment and properly understand the most significant emission sources on each link, as this is essential to confidently target potential interventions

2.3 Birmingham Clean Air Zone

A Clean Air Zone (CAZ) is an area where targeted action is taken to improve air quality, by discouraging the most polluting vehicles from entering the zone. No vehicle is banned in the zone, but those which do not have clean enough engines will have to pay a daily charge if they travel within the area.

The Government has said that Birmingham needs a Clean Air Zone and that the council need to reduce levels of NO_2 in the air to a maximum average of 40µg/m^3 as soon as possible. Birmingham's Clean Air Zone will cover all the roads within the A4540 Middleway Ring Road, but not the Middleway itself:

At the time of preparing this AQAP, Birmingham's CAZ had been delayed, initially due to technical difficulties and then the Coronavirus pandemic and was not due to come into operation before 1 January 2021 at the earliest. It will operate 24 hours a day, 365 days a year and the charges will be applied daily. A non-compliant vehicle driving in the CAZ will pay once for the day, but then may drive in the CAZ area without limit on that day.

The Sandwell and West Birmingham partnership has been formed to explore the identify areas of quantify the effects of the implementation of the CAZ on pollution levels in Sandwell and explore mitigation measures that could be employed deal with any displacement of older polluting vehicles. It is also an opportunity to work together on projects which will benefit both parties.

2.4 Air Quality and Climate Change

Sandwell Council is in the process of developing a Climate Change Strategy and has set a target of becoming carbon neutral no later than 2041. An integrated approach to tackling air quality and climate change makes sound sense as the emissions that pollute our air and those that warm the planet have common sources: vehicles, buildings, power generation and industry. Given the synergies with air pollution, the consultation on the Climate Change Strategy ran in parallel with the draft Air Quality Action Plan for six weeks from 20 January 2020. For the same reason the former Air Quality Working Group has become the Climate Change Working Group to enable a focus on a wider agenda. Membership has been extended accordingly and specific workstreams established.

3 Sandwell Council's Air Quality Priorities

3.1 Public Health Context

Air pollution affects mortality, from cardiovascular and respiratory conditions to lung cancer. In its report on "The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom", published in 2010, the Committee on the Medical Effects of Air Pollutants (COMEAP) estimated the mortality burden of existing levels of air pollution on the population of the UK as being equivalent to 29,000 deaths and an associated loss to the population of 340,000 life-years.

The above findings were updated in February 2016 in a subsequent report "Every breath we take: the lifelong impact of air pollution" published jointly by the Royal College of Paediatrics and Child Health (RCPCH) and the Royal College of Physicians (RCP). Whilst the COMEAP report estimates the health impact of particulate emissions, the more recent report accounts for the additional impact of nitrogen dioxide on health and estimates that the mortality burden of air pollution is closer to 40,000 deaths per year.

Poor air quality can have an impact on vulnerable individuals such as children and the elderly. Poor air quality has been linked with increased infant mortality and can make low birth weight births more likely. It has also been linked with the development and exacerbation of asthma amongst children. Some chemicals in air pollution may also be implicated in the development of obesity because it is known that obese people are more sensitive to air pollution. Elderly individuals are more susceptible to the effects of poor air quality and are at greater risk of diseases such as COPD and pneumonia.

Although air pollution is harmful to everyone, vulnerabilities are heightened among those living, learning and working in the most deprived communities (where higher levels of air pollution can often be found because of proximity to busy roads) due to poor housing and indoor air quality, the stress of living on a low income and limited access to healthy food and/or green spaces. Moving away from an area of high outdoor air pollution may be unaffordable for residents and some people may not want to leave their homes.

The Public Health Outcomes Framework (PHOF) is a Department of Health data tool for England, intended to focus public health action on two high level outcomes:

- increasing healthy life expectancy
- reducing differences in life expectancy and healthy life expectancy between communities.

Deaths where poor air quality is a contributing factor would be included in this indicator, including particulate matter and nitrous oxides. Recognising the significant impact that poor air quality can have on health, the PHOF includes an indicator specifically relating to fine particulate matter ($PM_{2.5}$).

In 2018, 5.8% of all adult deaths in Sandwell were attributable to the particulate matter produced by human activity, which compares poorly with the percentages for England and the West Midlands of 5.2% and 5.0% respectively. Updates can be found here.

The indicator aims to raise awareness of the effect of air pollution on public health. It is intended to encourage promotion of the need for local, regional and national actions to reduce air pollution and to help form a partnership between all delivery partners in pursuit of this goal.

As contained in the Public Health England report "Estimating Local Mortality Burdens associated with Particulate Air Pollution" published in April 2014, the deaths associated with air pollution are 198 for Sandwell and 1460 for the West Midlands as a whole. The data however relates to particulate matter only and not nitrogen dioxide. Using the findings of the "Every breath we take…." report, which states that the national mortality burden due the combination of particulate and nitrogen dioxide air pollution is 40,000 deaths, it could therefore be assumed that Sandwell's mortality burden due to air pollution is higher than 198 deaths.

3.2 Planning and Policy Context

The Black Country Air Quality Supplementary Planning Document (SPD) has been developed in order to clarify the air quality position within the Black Country Plan following the publication of the Low Emission Towns and Cities Best Practice Planning Guidance for the West Midlands. The SPD was adopted in October 2016 and is in the process of being updated. The principal aim of the SPD is to ensure all new development is sustainable in terms of air quality and where appropriate, secures mitigation measures that should be incorporated into developments. Mitigation requirements range from Electric Vehicle charging points at minor developments to a full Low Emission Strategy (in scale and kind) at 'Major' developments. The document

is aimed at demonstrating how easy it can be to adopt sustainable travel choices, taking into account journey time, safety, public transport frequency, quality, and access for disabled people. The document formally addresses a need for developers to review proposed transport related emissions whilst simultaneously seeking reductions in greenhouse gases. It offers on transport assessments and travel Plans whilst providing assistance to the development process, by:

- promoting a professional and transparent approach to planning
- helping to speed up planning application decisions by avoiding delays
- providing information which could assist developers.

Sandwell also produces a schools Sustainable Modes of Travel Strategy (SMOTS) every year, to provide information on how school journeys can be supported through the use of travel plans, set up by schools using the Modeshift STARS online tool, and through support from other agencies and council services.

In 2014 The West Midlands Low Emissions Towns and Cities Programme (WMLETCP) published Good Practice Air Quality Planning Guidance to help regional authorities achieve UK Air Quality Objectives and EU Air Quality Limit. Its aim was to pursue a simplified approach to dealing with air quality within the planning system:

- to avoid and reduce vehicle use and encourage a shift to sustainable transport
- to target emission improvements of vehicle fleets through the accelerated take-up of cleaner fuels and technologies
- to discourage the use of high emission vehicles.

It is a mechanism for planning authorities to work with public and private sectors, and other stakeholders, to implement measures which reduce the impact of emissions from traffic and development on public health and air quality. The WMLETCP Good Practice Air Quality Planning Guidance can be found at the WMLETCP homepage.

This guidance has been incorporated into the Black Country SPD on Air Quality which set outs simplified guidance for dealing with air quality and is aimed at all those involved in the submission and determination of planning applications where air quality needs to be addressed.

Air Quality is not limited to local authority boundaries, rather the associated effects of development can have impacts across wider regional areas. Therefore, to enable a

consistent approach to improving air quality across the Black Country, this joint SPD has been developed to cover all four local authority areas.

The emerging Black Country Ultra Low Emission Strategy and Implementation Plan seeks to bring together and complement a range of existing strategies and policies to promote Ultra Low Emission Vehicles (ULEVs) in the Black Country, with an implementation plan to support their delivery. On behalf of the four Black Country Authorities, the City of Wolverhampton Council, submitted a successful funding application to the BCLEP Local Growth Fund in August 2019, for £130,000 of development funding. The grant funding is required to support development and delivery of the Black Country ULEV Strategy and Implementation Plan and the wider programme of supporting works. The strategy and implementation plan will set out a five-year delivery framework to accelerate the uptake of ULEVs across the Black Country to tackle climate change and local air pollution. It will directly support the delivery of future capital assets within all four Black Country authority administrative areas.

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Sandwell Council's area.

Source apportionment exercises were carried out by Sandwell in connection with targeted feasibility studies in 2018 and 2019 and in connection with the LETCP during 2015. Although the way this information has been calculated recorded is not consistent between sites, it does serve to demonstrate that vehicle exhaust emissions remain the largest contributor to NO_2 levels in Sandwell.

Roads in exceedance	Petrol Car	Diesel Car	Petrol LGV	Diesel LGV	Rigid HGV	Artic HGV	Bus & Coach	Regional bkgd	Urban bkgd (non traffic)	Urban bkgd (traffic)
A457 Oldbury	4	16	0	15	9	7	7	5	19	23
A41, J1 M5 West Bromwich	5	22	0	17	11	7	7	4	13	13
A41 Black Country Route at Wednesbury	5	22	0	17	11	7	7	4	13	13
A34 Great Barr	5	22	0	15	9	5	4	5	9	24
A41 Black Country Route (W)	6.8	38.0	0.1	28.2	11.3	6.9	8.3	Traffic sources only		
A41 Black Country Route (E)	6.7	37.7	0.1	28.1	11.5	7.0	8.4	Traffic sources only		
Bearwood Road, Smethwick	31		6		8		57	Traffic sources only		

Table 3.1 Summary of source apportionment exercises

3.4 Required Reduction in Emissions

The annual mean concentration of NO_2 at each monitoring point in the areas that currently exceed the annual mean objective of 40 μgm^{-3} has been projected up to 2025 using the year adjustment factors published by Defra at:

https://laqm.defra.gov.uk/tools-monitoring-data/roadside-no2-projection-factor.html

The factors have been calculated as the average of modelled concentrations across approximately 1,900 road links in London, and 7,000 links elsewhere, taking into account the changes in traffic activity, and emission factors for NO_x and primary NO_2. Table 3.1 applies adjustment factors appropriate for use outside London where Heavy Duty Vehicles (HDVs) make up more than 10% of the traffic. This modelling is based on validated diffusion tube measurements from 2018 and predicts that by 2021 the majority of monitoring points will have achieved compliance with the objective, with the remaining sites reaching compliance by 2022.

	Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Zone or Hot Spot	Adjustment factor	0.954	0.908	0.859	0.808	0.762	0.723
Area between M5, Birmingham Road and Blakeley Hall Road – Oldbury	BE	47.9	45.6	43.1	40.6	38.3	36.3
	BF	35.2	33.5	31.7	29.8	28.1	26.7
	BDQ	44.5	42.4	40.1	37.7	35.5	33.7
	BD	41.5	39.5	37.4	35.1	33.1	31.5
	BO	41.3	39.3	37.2	35.0	33.0	31.3
	BR	39.5	37.6	35.6	33.5	31.6	29.9
Newton Road / Birmingham Road	ZQ	49.2	46.8	44.3	41.7	39.3	37.3
	ZR	47	44.7	42.3	39.8	37.5	35.6
Bearwood Road, Smethwick	C9D	40.2	38.3	36.2	34.0	32.1	30.5
	C10A	45.6	43.4	41.1	38.6	36.4	34.6
	C10D	47.6	45.3	42.9	40.3	38.0	36.1
High Street / Powke Lane, Blackheath	C12A	40.7	38.7	36.6	34.5	32.5	30.8
	C12D	36.9	35.1	33.2	31.3	29.5	28.0
Bromford Road	N1B	40.2	38.3	36.2	34.0	32.1	30.5
Trinity Way / Kenrick Way, West Bromwich	C4D	43.1	41.0	38.8	36.5	34.4	32.7
	C4E	37.1	35.3	33.4	31.4	29.6	28.1
All Saints Way /	C2A	37.6	35.8	33.9	31.8	30.0	28.5
Mallin Street, Smethwick	MA	42.4	40.4	38.2	35.9	33.9	32.1
Gorsty Hill, Rowley Regis	C15A	39.8	37.9	35.8	33.7	31.8	30.2

Table 3.2: Projected annual mean roadside NO_2 concentrations (μgm^{-3}) to 2023

The required reduction in NO_2 varies between zones and the figures should be treated with caution. However, the model illustrates the predicted impact on roadside concentrations that improvements in vehicle emission controls and changes in fleet composition may bring.

3.5 Key Priorities

The principal source of air pollution in Sandwell is vehicle exhaust emissions, particularly those from diesel engines. Elevated nitrogen dioxide levels are observed at busy junctions, narrow congested streets and in town centres.

The council's aims are:

- To reduce the overall health impacts and burdens of poor air quality
- To achieve the national air quality NO_2 annual mean objective across the borough in the shortest possible timeframe.
- To reduce PM_{10} and $PM_{2.5}$ concentrations to protect human health

These are supported by the following prioritised actions:

Priority	Action
Priority 1	Developing specific measures in consultation with communities to reduce NO_2 concentrations at "hot spot" locations.
Priority 2	Promoting public transport, walking, cycling and switching to low or zero emission vehicles.
Priority 3	Reviewing what impact the council has on air quality in its role of as a provider of public services and develop a plan to reduce emissions from its activities. This will include reducing emissions from council fleet and employee vehicles.
Priority 4	Supporting and encourage taxi and private hire vehicle operators and drivers in reducing emissions from vehicles.
Priority 5	Applying existing and developing new planning development policies that support air quality improvements.
Priority 6	Developing information, social media and campaigns to encourage behaviour change around improving physical health and increasing use of low emission vehicles.
Priority 7	Working in partnership with Birmingham CC to minimise negative impacts on Sandwell residents resulted from the implementation of the CAZ.

Table 3.3: Prioritised actions for Sandwell's AQAP 2020 - 2025

With regard to Priority 1, specific measures in consultation with communities to reduce NO_2 concentrations at “hot spot” locations, the following options are to be considered for each of the locations:

- Review of signalling
- Speed Management & Enforcement
- Traffic calming
- Bus Retrofit to Euro VI & Route Management
- Alternative walking & cycling routes
- Barrier screening
- Driver training
- Travel planning
- Highway upgrades

Table 5.1 sets out in detail the full range of actions proposed to achieve compliance with the annual mean objective for NO_2 throughout Sandwell.

4 Development and Implementation of Sandwell Council's AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. In addition, we have undertaken the following stakeholder engagement:

- Website
- Articles in local newspaper
- Questionnaires distributed directly to households along major roads
- Consultation with community groups
- Consultation with business stakeholders

Public consultation exercises have been undertaken in each town, to record the views of these groups and test the practicalities of any proposed actions.

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

Table 4.1 – Consultation Undertaken

Yes/No	Consultee
No	The Secretary of State
No	The Environment Agency
No	The Highways authority
No	All neighbouring local authorities
No	Other public authorities as appropriate, such as Public Health officials
No	Bodies representing local business interests and other organisations as appropriate

4.2 Steering Group

Partners from Public Health and Regeneration & Economy departments of Sandwell MBC meet quarterly to discuss air quality issues and potential air quality improvement measures, along with updating the Air Quality Action Plan when required. Representatives from Highways England, West Midlands Combined Authority and Transport for West Midlands have been members of the Air Quality Working Party.

Air quality improvement in Sandwell is supported policies contained in the Black Country Core Strategy (now the Black Country Plan) and the subsequent Black Country Air Quality Supplementary Planning Document (adopted September 2016)

The link between Public Health and Planning is being strengthened both locally in Sandwell through the Healthy Urban Development Officer and regionally through the West Midlands Health and Planning Group. There is therefore an opportunity to address air quality issues by healthy urban planning through engagement with planning and transportation planning colleagues.

5 AQAP Measures

Error! Reference source not found. shows the Sandwell Council's 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
- the timescale for implementation
- how progress will be monitored

Annual updates on the implementation of these measures will be reported in future ASRs.

Within Table 5.1 the actions are evaluated in relation to their expected impact on:
• air quality (i.e. reduction in emissions or concentrations);
• cost; and
• implementation timescale.

Those actions which also contribute to the Climate Change Action Plan have been highlighted in blue.

Air quality impacts have been classified to represent 'low 'to 'high' impact. For each action, the expected reduction in annual mean NO_2 concentrations has been determined based on professional judgement, drawing, wherever possible, on experience gained from other studies. The following classification scheme has been used:

- **Low**: imperceptible (a step in the right direction). Improvements unlikely to be detected within the uncertainties of monitoring and modelling.
- **Medium**: perceptible (a demonstrable improvement in air quality) improvement of up to 2 µg/m3 NO_2, which could be shown by a modelling.

- **High**: A significant improvement, greater than 2 µg/m3 NO_2. It can be clearly demonstrated by modelling or monitoring (a significant improvement is likely to be delivered by a package of options rather than by a single intervention).

The implementation of the measures set out in this Action Plan are dependent on securing a sufficient and consistent level of funding both to support any additional staff that may be required, and to deliver the programme. The aim is to provide a broad indication of costs so that the proposed measures can be ranked according to the cost and the expected improvement to air quality. Costs are represented as follows:

- 'Very Low' cost is taken to be £10K and under
- 'Low' cost is taken to be £10 - £50K; 'Medium' cost is £50 - 500K
- 'High' cost is £500K - £2 million
- 'Very High' cost is over £2 million

5.1 Table of Air Quality Action Plan Measures (Actions contributing to Climate Change Action Plan highlighted in blue)

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
1	Develop Air Pollution model of Sandwell to identify additional hot spots and how these relate to traffic flowing through Sandwell.	N/A	N/A	SMBC	2020	2020	Completion of model	Not applicable	Screening model produced 2018	2021	
2	Review transport planning and traffic infrastructure at each hot spot location and identify and implement programme of work where practicable to reduce NO_2 concentrations	Traffic Management	Other	SMBC	2020	2021	Annual average NO_2 value	Site specific targets to achieve <40ug/m^3	On-going	2023	
3	Promote car sharing among residents and businesses in the area	Alternatives to private vehicle use	Personalised Travel Planning	SMBC	Complete	On-going	Total participants using the scheme	Not known	On-going implementation and promotion of the scheme.	On-going	Further promotion of scheme increased the number of registered users. Sandwell Carshare
4	Ensure AQ considerations are included in the new Local Development Framework Ensure policies seek to reduce the need to travel and promote the use of modes other than the car	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	SMBC LETCP WMAs BCCS	Complete	On going	Reduction in vehicle emissions	Medium to high long term	Publication of Procurement and Planning Guidance and implementation intended across the West Midlands Metropolitan Authorities	On going	Procurement policies to influence a reduction in road transport emissions. Guidance published

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
5	Black Country Low Emission Strategy and Implementation Plan.	Policy Guidance and Development Control	Low Emissions Strategy	2017	Sandwell and Black Country Authorities	Sandwell and Black Country Authorities	Increase use of ultra-low emission vehicles.	No target	Funding obtained from Black Country Local Enterprise Partnership to develop plan in 2019	On-going	Promotion of low emission vehicles.
6	Use of S106 agreements where practicable to secure monitoring funding and balancing measures for developments where AQ is an issue	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	SMBC Planning & Public Health	Complete	On-going	Implementation of guidance and appropriate air quality conditions attached to planning permissions.	Medium to High long-term	Planning Guidance / Black Country SPD states all new development will be required to contribute to offsetting emission creep, plus larger contributions if significant new sources are introduced.	On-going	To protect and enhance air quality through development
7	Provide guidance in relation to air quality for developers when submitting planning applications	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	SMBC LETCP WMAs BCCS	Complete	On going	Improve vehicle fleet emission	Medium to High long-term	Publication of Procurement and Planning Guidance and implementation intended across the West Midlands Metropolitan Authorities	On-going	Procurement policies to influence a reduction in road transport emissions Guidance published
8	Continue to consider air quality issues for new planning applications in line with the agreed planning protocol	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	SMBC	Complete	On-going	Planning approvals with appropriate air quality conditions	Medium to High long-term	AQ conditions are applied routinely	On-going	All planning applications assessed against SPD and Planning Guidance

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
9	Review SMBC vehicle profile and formulate strategy for improvements reducing emissions	Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	SMBC	2021	2021	Reduction in number of pre-Euro 5 vehicles	To be determined	Not applicable	2021	New vehicles are Euro 5 / 6 compliant. Monthly fuel reports produced; user group meetings aim to improve efficiency Actions 26 (3), 27 (6) deleted.
10	Review and implementation of electric charging and other low emission refuelling options for SMBC vehicles	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharging	SMBC	2020	2021	Number of electric charging points installed	Low	Not applicable	2025	The Black Country authorities have received £130,000 from the LEP to move the EV agenda forward in the Black Country
11	Review taxi & PHV fleet licenced by SMBC (including fleet make-up, age and emission profiles)	Promoting Low Emission Transport	Other	SMBC	2020	2020	Report findings	To be determined	Not applicable	2021	
12	Determine the most effective ways to influence and improve low and ultra-low emission vehicle use in taxi fleet.	Promoting Low Emission Transport	Taxi emission incentives	SMBC	2020	2020	Number of vehicles that comply with new standard.	To be determined	Not applicable	On going	
13	Engage with council employees to promote low and ultra-low emission vehicle technologies	Promoting Low Emission transport	Company Vehicle Procurement - Prioritising uptake of LEVs	SMBC	2021	2021	Number of employees switching to LEVs	To be determined	Not applicable	On going	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
14	Promote car club/pool vehicles and sustainable modes of travel to reduce use of SMBC employees' vehicles	Promoting travel alternatives	Workplace Travel Planning	TfWM / SMBC	Being developed	Being developed	Reduced mileage claims by local authority staff	Not known	A report on the feasibility of introducing such a system has been presented to the WMCA's Strategic Transport Officer Group	On going	Organisations adopting this approach have reduced mileage claims by 30% and vehicles have lower emissions
15	Improvement in branding to increase attractiveness of public transport	Promoting Travel Alternatives	Workplace Travel Planning	NEXM TfWM	On-going	On-going	Increased Public Transport patronage	Not known	On-going programme of brand improvement and public awareness, including Safer Network, improved connections signage and ease of access.	On-going	
16	Improving access to information regarding transport options	Promoting Travel Alternatives	Personalised Travel Planning	SMBC TfWM	On-going	On-going	Increased Public Transport patronage	Not known	On-going promotion of branding and services available.	On-going	
17	Promotion of Walking	Promoting Travel Alternatives	Promotion of walking	SMBC	Complete	On-going	Increased uptake of walking for key journeys. Sandwell; travel surveys	Not known	Sandwell MBC Walking Strategy published in 2015	Completed documents, with on-going promotion of walking	Sandwell Travelwise webpage updated to promote alternative travel Travelwise Sandwell

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
18	Promotion of Cycling	Promoting Travel Alternatives	Promotion of cycling	SMBC	Complete	On-going promotion of cycling	Increased uptake of cycling for key journeys. Sandwell Travel surveys	Not known		On-going	Sandwell's Cycling strategy is a several years old and would benefit from updating. On-going promotion of cycling needed
19	Encourage travel plans for employers, schools & hospitals	Promoting Travel Alternatives	Workplace Travel Planning	SMBC NEXM TfWM	Complete	On going	Number of travel plans adopted– including those attached to planning applications.	Low to medium long-term	Travel Plan SPD requires certain developments to implement a Travel Plan. This work is on-going, with the number of travel plans implemented increasing annually. Started using online Modeshift STARS Education and Business tools.	On-going	Travel Plan SPD adopted by Sandwell Council. Considered for all relevant planning applications
20	Provide air quality information and promote sustainable transport in schools	Promoting Travel Alternatives	School travel plans	SMBC	On-going	On-going	Increase in sustainable travel modes in schools	Reduction in NO_2 and PM_{10} $PM_{2.5}$ concentrations	Limited Progress to date. School Travel Plans are a key element of the planning process, but limited funding available to promote sustainable transport at schools. Started using online Modeshift STARS tool.	On-going	An annually updated Sustainable Modes of Travel Strategy (SMOTS) for schools is required by the Education and Inspections Act (2006) to be produced by all local authorities. SMOTS

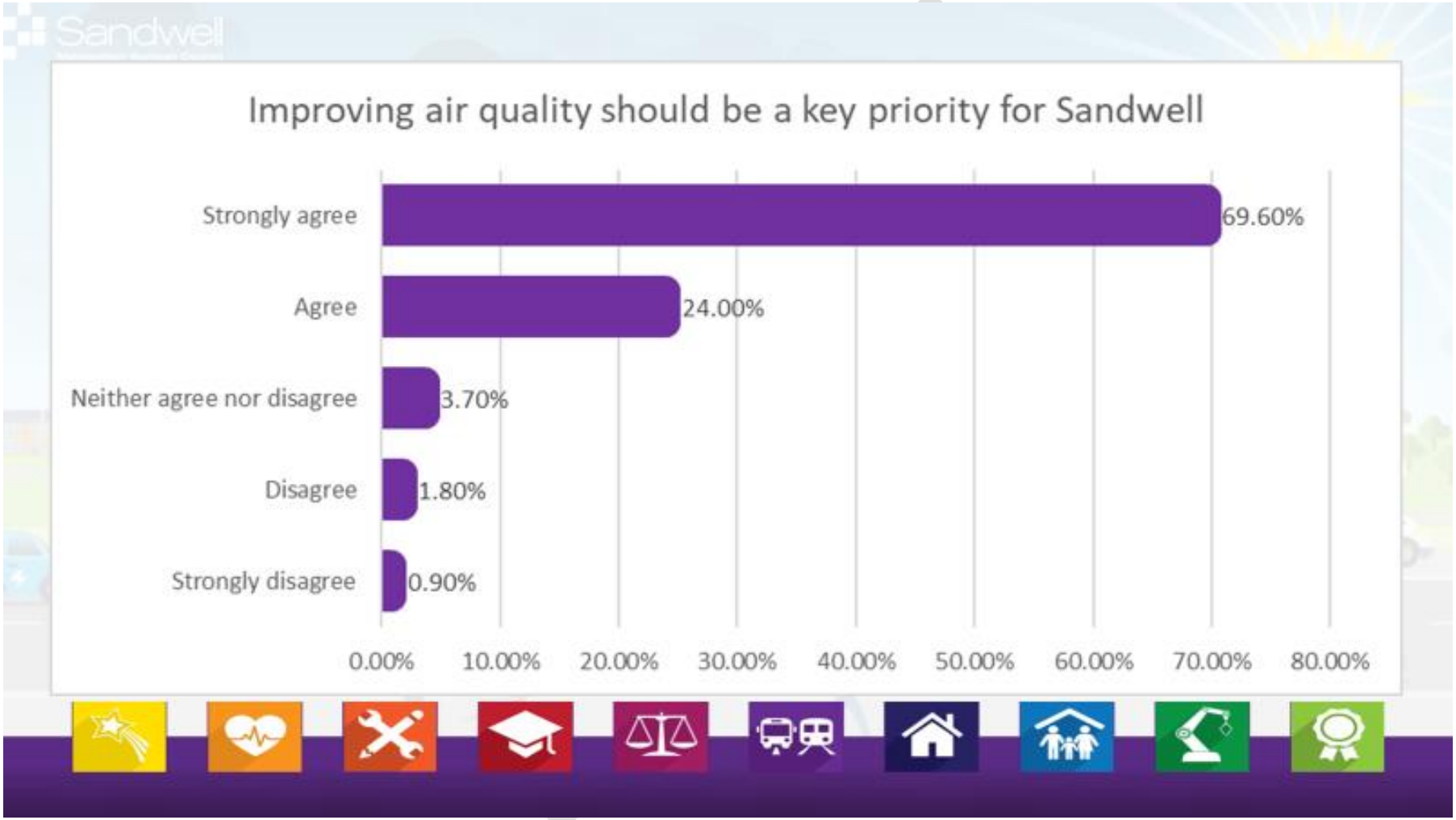
Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
21	Publish Air Quality information website	Public Information	Via the Internet	SMBC	Complete	On-going	On-going	Not applicable	On going	On-going	Real time information system to be developed
22	Major Highway Improvement at Birchley Island (Junction 2 M5)	Traffic Management	Other	SMBC WMCA	Planned	2022		To be determined	Reduced congestion	To be determined	
23	Increased bus lane enforcement (increase number of cameras on buses and static cameras for bus lane enforcement)	Traffic Management	Other	NEX(M) SMBC TfWM	Complete	On-going	Increased enforcement actions	Minor	Bus lanes at Walsall Street, and Hagley Road West. Bus only street at new Street, West Bromwich	On-going	Marginal improvement in emissions due to improved bus journeys.
24	Improvement of Urban Traffic Control Systems designed to reduce congestion	Traffic Management	UTC, Congestion management, traffic reduction	WMCA	On-going	On-going	Reduced Congestion	Low	On-going, use of the Urban Traffic Control. Potential opportunity for further expansion	On-going	Potential reduction at locations where traffic control systems are in place.
25	Midland Metro extension (Wednesbury to Brierley Hill)	Transport planning and infrastructure	Other	WMCA BCEJC	2016	2022/23 Monitor development schedule	Increased Public Transport patronage	Level of reduction	Still in the planning stages to secure funding.	2023/24	
26	Actions to mitigate any negative impact of Birmingham CAZ	Transport planning and infrastructure	Other	SMBC BCC	2019	2021	Changes in NO_2 on routes leading to CAZ	No deterioration as a result of CAZ	Partnership established with BCC	2021	

Appendix A: Response to Consultation

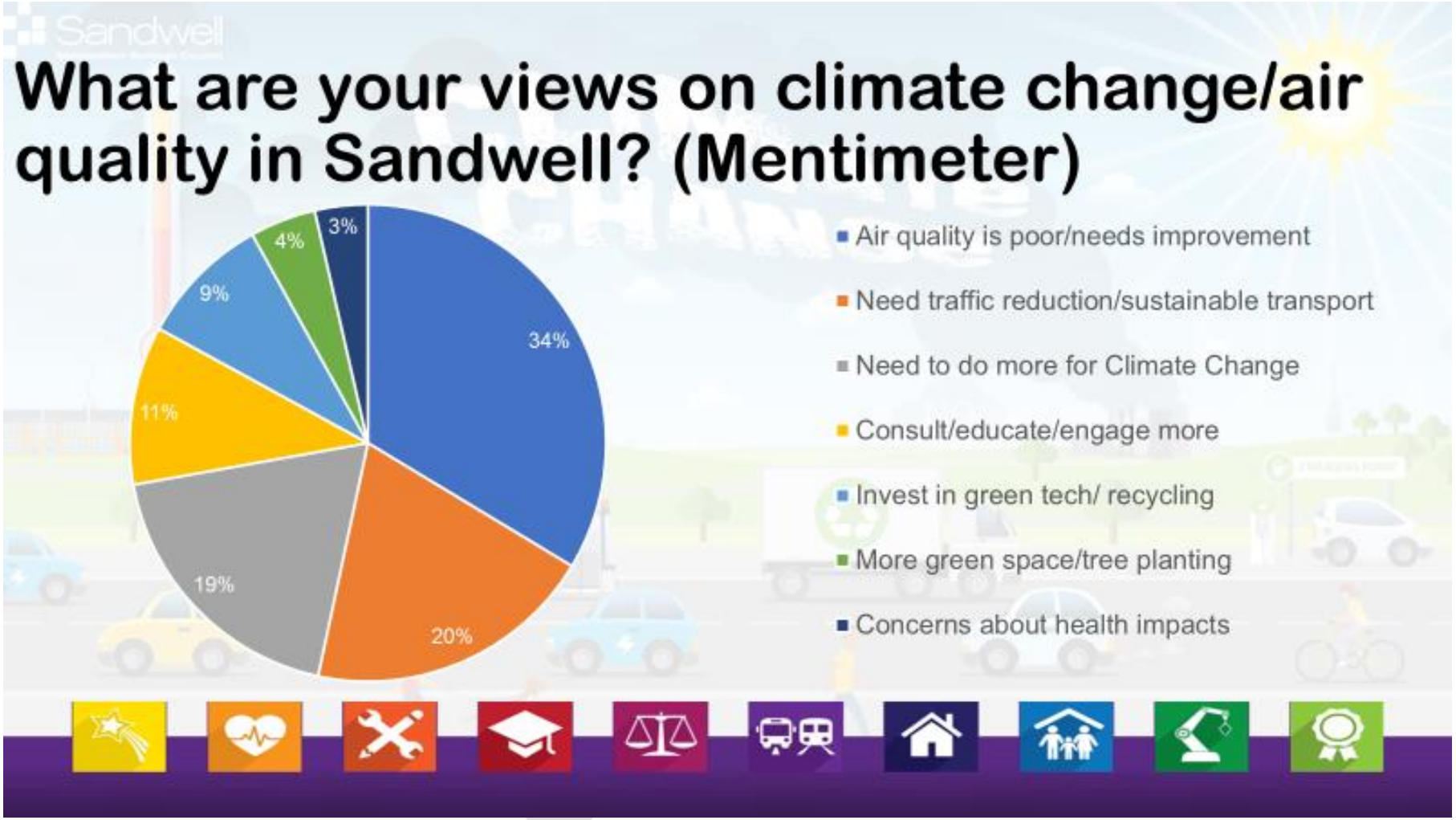
Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
The Secretary of State		No response.
The Environment Agency		No response.
The Highways authority		No response.
All neighbouring local authorities		No response.
Other public authorities as appropriate, such as Public Health officials		No response.
Bodies representing local business interests and other organisations as appropriate		Just under 650 participants attended 15 consultation events. Officers attended council/ councillor meetings to share the survey. Staff, businesses, voluntary sector and residents were targeted. 2000 business cards were distributed. 787 surveys completed. Social media, tabloids and screensavers were used to encourage participation. A summary of the results is presented on the following pages.

Do you agree that improving air quality should be a key priority for Sandwell?

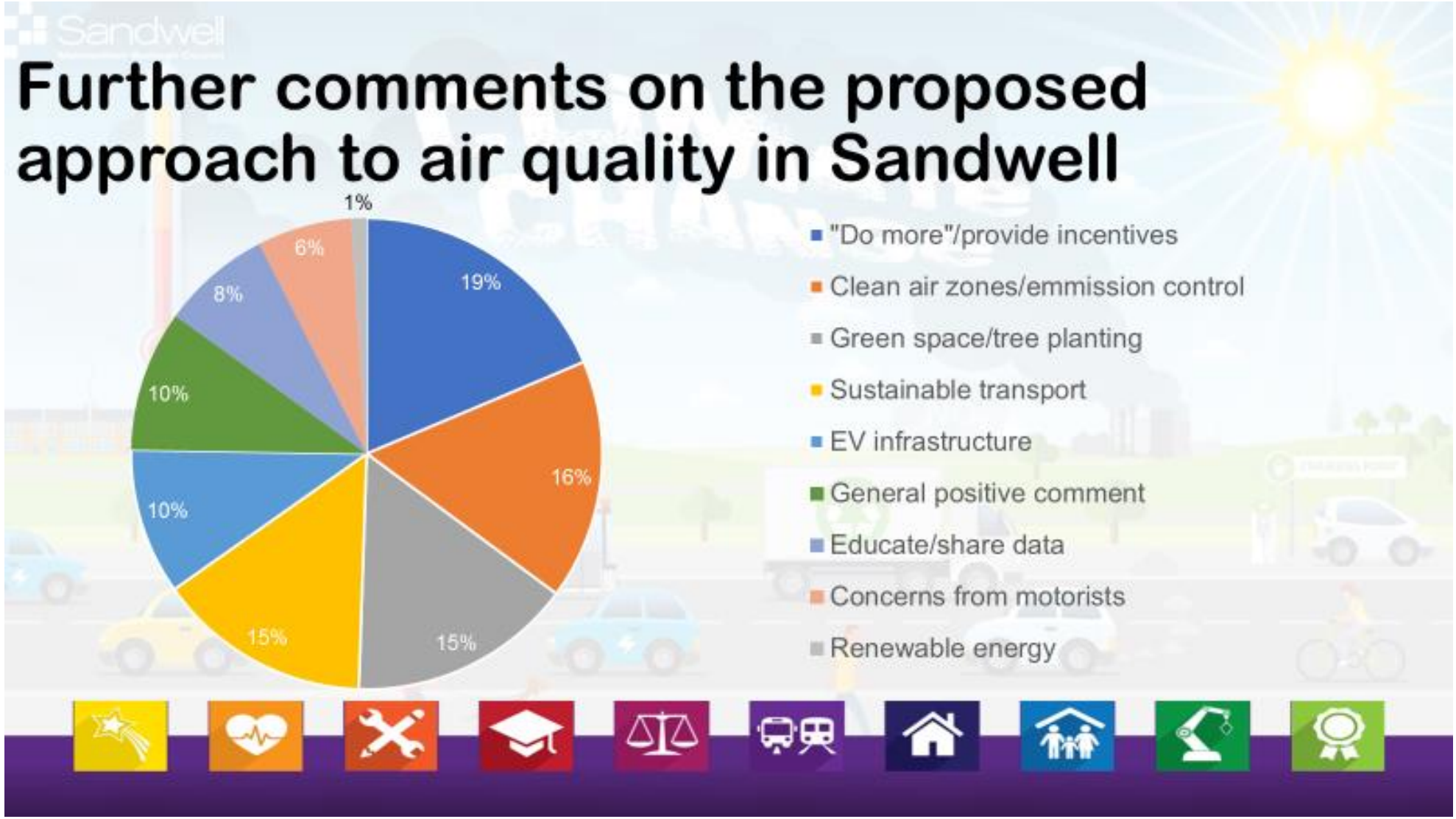


What are your views on climate change/air quality in Sandwell?



The results show that 34% of responses stated that they believed current air quality in Sandwell was poor and needed improvement; in many cases this was linked with the 20% of responses that included references to the need for traffic reduction and use of sustainable transport, as many expressed concerns over the effect of large volumes of traffic on their health.

Do you have any further comments on the proposed approach to air quality in Sandwell?



Commentary on response to the question “Do you have any further comments on the proposed approach to air quality in Sandwell?” Responses to this question were rather vague and it suffered from being at the end of the main consultation. However the data show a useful snapshot of the key areas of concern for respondents in regards to air quality, as well as an overview of the more popular methods to address these.

- The most popular category (19%) was made up of responses that felt more could be done to tackle air pollution in the borough than that outlined in the Air Quality Action Plan, though it was clear that for several responses that the actual Action Plan had not been read and instead this was a general statement about the air quality in the borough. A further 10% of responses were positive comments, or messages of support.

- The most popular working suggestion was to introduce pollution control or ‘clean air zones’ in the borough to reduce the number of vehicles or polluting industries in residential zones or pollution hotspots. Responses varied from suggesting declaring a borough wide clean air zone, to banning non-delivery/public transport vehicles from town centres or restricting older, more polluting models. Another popular suggestion was to introduce fines for those idling cars outside of schools during pick-ups and drop offs.

- Green space and sustainable transport made up a big proportion of responses and mostly re-stated actions contained in previous questions. Though a number of respondents were supportive of increased tree planting to act as ‘green lungs’ to improve air quality locally. EV infrastructure, education, and renewable energy again made up smaller proportions, though responses were covered previously; though there were still some interesting suggestions, such as having live air quality data maps online, or readouts on LED screens next to busy roads. Only (6%) of responses were from concerned motorists, who felt that introducing anti-car measures would impact on them negatively, and so were opposed to introducing pollution control zones for vehicles.

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)

None of the proposed Action Plan Measures will not be pursued following consultation.

Appendix C: Trends in NO_2 and PM_{10} concentrations in Sandwell

Figure C1 – Trends in Annual Mean NO_2 Concentrations

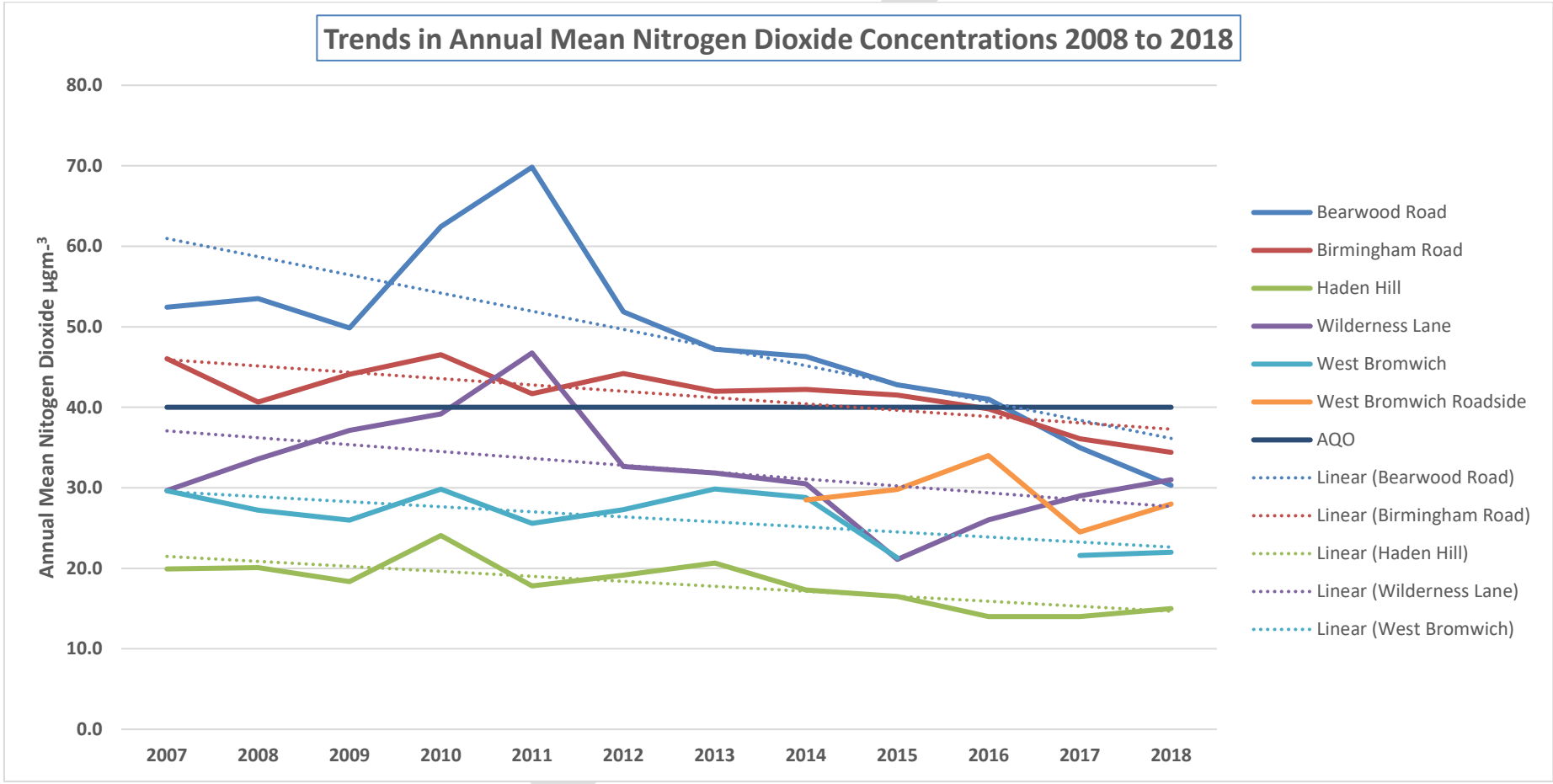
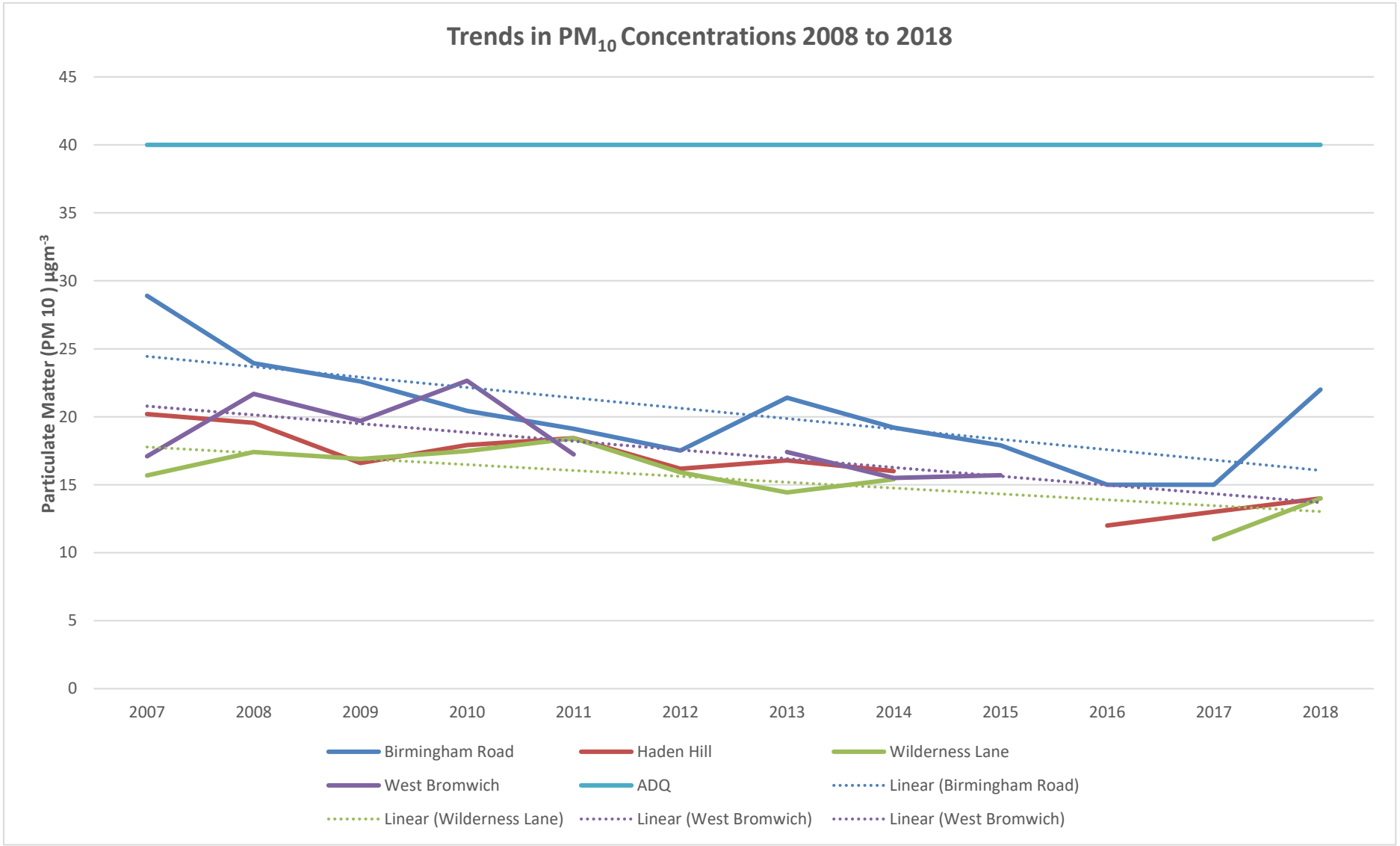


Figure C2 – Trends in Annual Mean PM_{10} Concentrations



Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
CAZ	Clean Air Zone
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides (NO_2 and NO)
PCM	Pollution Climate Model
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
TfWM	Transport for West Midlands
WMCA	West Midland Combined Authority
WMLETCP	West Midlands Low Emissions Towns and Cities Project

Sandwell
Metropolitan Borough Council

Climate Change Strategy

2020 - 2041

Contents

Foreword

“There is no greater challenge for our society than climate change.”

As we battle against the current pandemic this may seem like an odd statement but for the sake of our long-term future we need to focus on climate change now to make the difference we need to make over the coming decades.

The current pandemic has altered all our lives dramatically -no war, no recession, no previous pandemic has had such a dramatic impact on emissions of carbon dioxide over the past century, as Covid-19 has in a few short months.

Whilst we need to do everything we can to minimise the impact of COVID-19 on our residents we do not want to return to ‘business as usual’ and we need to plan for a new fairer, more sustainable ‘new normal’ that will benefit both our communities and the environment.

Sandwell has a proud industrial past and together we need to create a green industrial revolution in the Borough. We also have a strong thriving community and these assets will be key to achieving the Borough’s carbon goals.

This strategy sets out the actions we need to take to get us to our target of net zero carbon emissions for the Council in 2030 and for the whole of the Borough in 2041 (in line with the West Midlands Combined Authority target).

Action is set out in six themes (1) Council Estate and Operations (2) The Built Environment (3) Transport (4) Waste (5) Adaptation and (6) Natural Capital.

This is the most important and complex challenge any society has faced, which is why the Council has taken it to the core of how it, operates, and why it will be so keen to work with residents, community groups, businesses and partners across the Borough to provide a genuine borough-wide response that can engage and support everyone in Sandwell

Councillor Wasim Ali
Climate Change Lead for Sandwell Council

Executive Summary

Climate change, driven by rising concentrations of greenhouse gases in the Earth's atmosphere, has been described by the Lancet medical journal as potentially the greatest threat to human health of the 21st century. This rising concentration of greenhouse gases has already led to significant global warming, with 19 of the 20 hottest years on record all occurring since 2001, and global mean average temperature almost 1°C warmer now than in the pre-industrial era.

In 2018 the UN Intergovernmental Panel on Climate Change released a report outlining that global emissions need to be reduced by 45% by 2030 if we are to have a reasonable chance of meeting the global goal, set out in the 2015 Paris Climate Agreement, to limit global warming to 1.5°C above pre-industrial levels. However, global carbon emissions rose rather than fell in the year following the Paris Climate Agreement.

Based on this evidence, Sandwell Council has joined other councils in England that have declared a Climate Emergency, and using analysis conducted by the Tyndall Centre at Manchester University, have adopted a goal to become carbon neutral as an organisation by 2030, and as a borough by 2041.

Sandwell itself is likely to be affected directly by increased exposure to heatwaves, flooding and air pollution, and indirectly via the impact on the food system, livelihoods and the supply of goods and services. Sandwell therefore needs to both mitigate climate change (i.e. reduce greenhouse gas emissions) and adapt to the potential impacts of climate change as an integrated response.

The importance of this has been bought home by the impact of Covid-19 on Sandwell and elsewhere, demonstrating that shocks to our way of life do not affect everyone equally in terms of health or livelihoods, and often affect those already facing disadvantage the most. To protect against the impacts of climate change we need to prioritise the health of those who are most vulnerable to them, now and in the future.

Mitigation

A human intervention to reduce the sources or enhance the sinks of greenhouse gases

Adaptation

Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

This document represents a high-level strategy for meeting science-based targets that will enable Sandwell to make its fair contribution to reducing UK emissions. It has been produced by Sandwell MBC with involvement of and consultation with local partners and residents. However, this strategy alone cannot implement the full range of actions required and will need to influence other plans and strategies that guide the Council's operations and how its services are delivered.

The Council will continue to work closely with local communities, businesses and institutions to develop a holistic approach to addressing climate change and air pollution, whilst also working towards wider ambitions of the Borough and its residents.

1 Introduction to Sandwell Climate Change Strategy

In March 2020 Sandwell Metropolitan Borough Council (SMBC) declared a Climate Emergency. In doing so, members agreed that greenhouse gas (GHG) emissions need to be reduced to a level that is compatible with keeping global warming below 1.5C above pre-industrial levels. To achieve that, the Council has adopted a target of becoming carbon neutral in its own activities by 2030, and carbon neutral borough-wide by 2041.

This is a high-level strategy for meeting science-based targets that will enable Sandwell to make its fair contribution to reducing UK emissions. It has been produced by SMBC with involvement of and consultation with local partners and residents.

This strategy is accompanied by a Climate Change Action Plan detailing the first steps to be taken towards meeting these targets.

The Action Plan covers six key themes:

1. Council estate and operations

2. The built environment

3. Transport

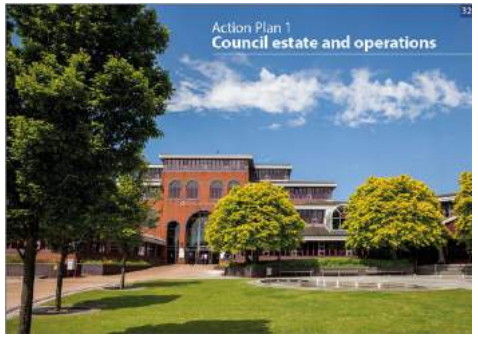
4. Waste

5. Adaptation

6. Natural Capital

The Action Plan will develop as policy changes and opportunities for action emerge, and as technological developments influence the range of available interventions. Sandwell will also seek to align its work with approaches taken in the wider Black Country and West Midlands regions, and to influence upwards to call for national policy that supports progress towards our targets.

This strategy is also integrated with Sandwell's Air Quality Action Plan 2020-2025 (AQAP), and some points within the climate change action plan will cross-reference the AQAP in cases where emissions sources overlap.



2 Background

In 2016 the UK became a signatory to the Paris Climate Agreement – a global agreement between 195 countries to limit global warming to below 1.5C above pre-industrial levels. This is an ambitious target, which requires steep reductions in emissions from the UK and other high-income countries. Following the Paris agreement, in June 2019 the UK government legally committed to cut emissions of carbon dioxide and other greenhouse gases to net zero, (or carbon neutral), by 2050.

Nationally, the Climate Change Act 2008 sets the framework for how the UK will mitigate and adapt to the threat of climate change. This is only possible if clear, consistent and well-designed policies to reduce emissions are introduced. The UK Committee on Climate Change (UKCCC) was established to advise on how to meet national targets, and currently advises on UK carbon budgets on a five-yearly basis, i.e. the total amount of GHGs that can be emitted in each five-year period between now and 2050, and how this can be achieved with current technologies.

However, in 2018 the UN Intergovernmental Panel on Climate Change released a report outlining that global emissions need to be reduced by 45% by 2030 if we are to have a reasonable chance of meeting the Paris Climate Agreement goals. Meanwhile, global carbon emissions rose rather than fell in the year following the Paris Climate Agreement.[1]

Based on this evidence, as of May 2020, 280 Councils in England have declared a Climate Emergency, and have sought to go beyond the legally mandated climate targets to align with science based targets for what is required. [2] Sandwell Council's carbon neutrality target of 2041 is compatible with having a 50:50 chance of keeping warming below 1.5°C, as per the Paris Agreement, and has also been adopted at regional level by the West Midlands Combined Authority. This is based on analysis developed by the Tyndall Centre at Manchester University that takes into account not only the remaining carbon budget globally, but how this should be fairly distributed.

Sandwell Council originally adopted a Climate Change Action Plan in 2006, which was progressed by a Local Agenda 21 team of officers. The new targets and emissions challenges mean however that Sandwell's work on climate change needs to be updated with a new Climate Change Strategy which will both reduce the amount of carbon produced (mitigation) and prepare for impacts (adaptation).

What does carbon neutral mean?

Being carbon neutral in 2041 means getting to a position where there is no net release of carbon dioxide into the atmosphere, i.e. anything we release is balanced by removing CO_2 from the air, typically via carbon capture and storage (CCS). In the absence of new CCS technologies, one option to achieve this is extensive tree planting. Based on currently available technologies, it is difficult to derive a pathway to zero emissions by 2041, and for this reason the Council have adopted a target of carbon neutrality.

The Borough will need to consider whether emissions are captured locally in Sandwell, or whether paying for forest protection or other CCS technologies available elsewhere may be more cost-effective.

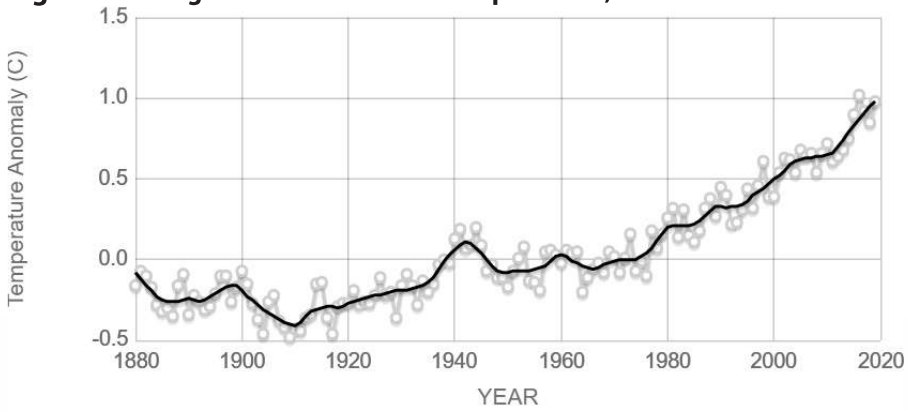
[1] **UN Environment Programme Emissions Gap report**

[2] **https://www.climateemergency.uk/blog/list-of-councils/ [accessed 20/05/2020]**

2 Background | 2.1 Why is this important?

The process of climate change relates to levels of greenhouse gases (GHG) in the Earth's atmosphere. GHGs such as carbon dioxide (CO_2), methane, nitrous oxide and fluorinated gases have a warming effect by letting in heat from the sun and trapping re-radiated heat from the Earth within the atmosphere. The most significant greenhouse gas, due to the quantity released, is CO_2. Since the pre-industrial era at the start of the 19th century, the concentration of CO_2 in the atmosphere has increased from about 280 parts per million to over 400 parts per million. This increase is due to emissions from the combustion of fossil fuels and human induced land use changes.

Figure 1 Average annual land-ocean temperatures, 1880-2020.



Source: climate.nasa.gov

The rising concentration of greenhouse gases has already led to significant global warming, with 19 of the 20 hottest years on record all occurring since 2001. Figure 1 presents the change in average annual surface temperatures since 1880 as recorded by NASA's Goddard Institute of Space Studies.

It is this relationship between CO_2 and global temperatures which means that staying within a given temperature threshold requires that only a certain total quantity of CO_2 is released into the atmosphere. This is known as the global carbon budget.[3]

If exceeded, the impacts that climate change has already had on natural and human systems, including increasing heatwaves, storms, wildfires, drought and flooding events, will accelerate, with impacts on human welfare and biodiversity that are difficult to predict. Nevertheless, the populations most at risk will be those that are already disadvantaged and vulnerable.

Sandwell itself is likely to be affected directly by increased exposure to heatwaves, flooding and air pollution (ozone formation in particular), and indirectly via the impact on the food system, livelihoods and the supply of goods and services. Sandwell therefore needs to both mitigate climate change (i.e. reduce GHG emissions) and adapt to the potential impacts of climate change as an integrated response. There will also be positive impacts of climate change – reduction in winter excess mortality, decreases in fuel poverty and longer growing seasons, that we need to maximise to our advantage. For that reason, both mitigation and adaptation are covered by this strategy, with Adaptation measures described in section 5 of the Action Plan.

There are 6 main heat-trapping greenhouse gases, but CO_2 is the single biggest contributor to climate change if it continues to accumulate unabated in the atmosphere. This is both because we have emitted more of it since the start of the industrial revolution than any other gas, and because it lasts longer in the atmosphere than any of the others - 40% will remain in the atmosphere for 100 years and 20% will reside for 1000 years. For this reason, the other greenhouse gases are often presented in terms of their equivalence to CO_2, or CO_2e.

[3] Tyndall Centre for Climate Research, Climate Change pathway for the WMCA

2 Background | 2.2 Sandwell context

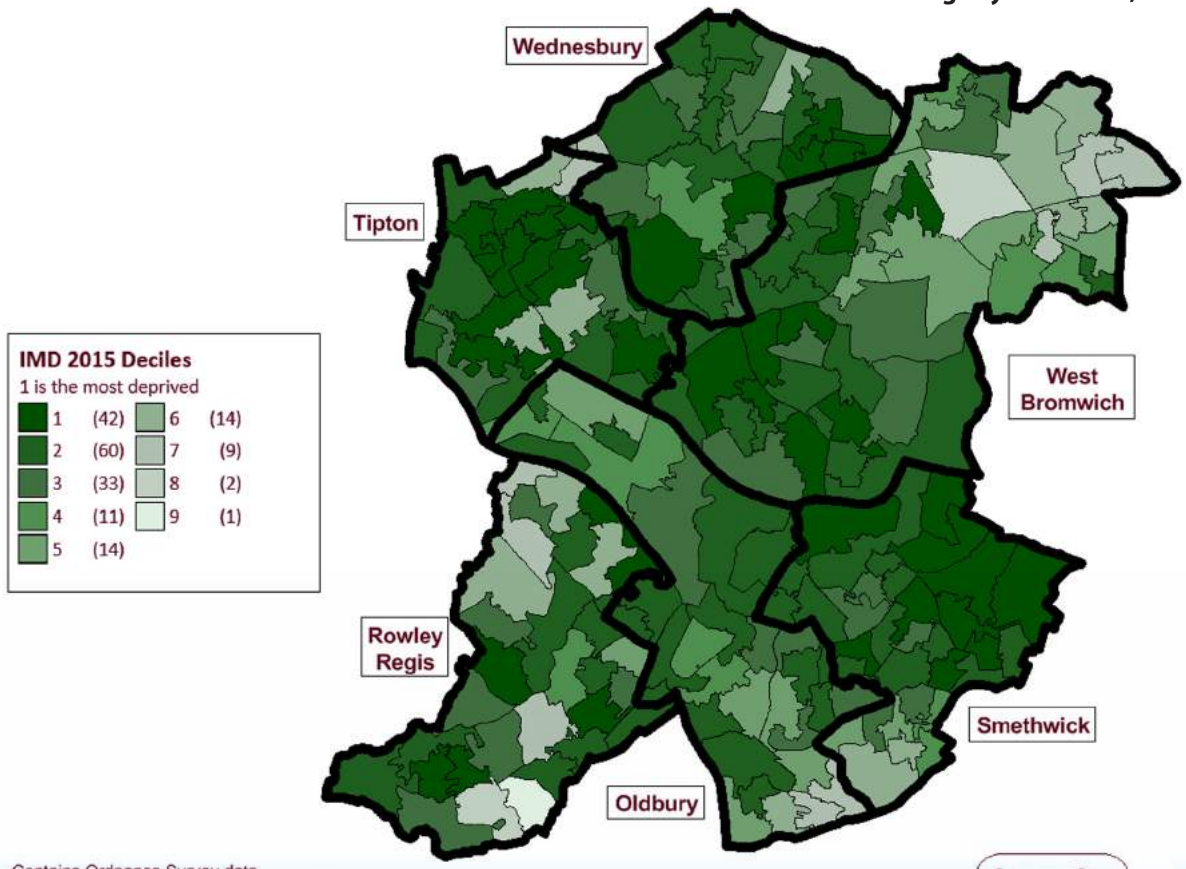
Sandwell is a metropolitan borough in the Black Country with a population of just over 325,000. Its population is younger than average for England, with just over 40% of residents aged under 30, compared with a national average of 30.7%. It is a diverse community, with 38.4% of residents from Black and Minority Ethnic (BAME) backgrounds, compared with a UK average of 14.0%. However, both incomes and productivity are lower in Sandwell than the average for England.[4] Related to this, Sandwell also has lower earnings, employment rates and educational attainment levels than average for the region and the country.

Figure 2 displays the index of multiple deprivation by smallest administrative area in Sandwell, each with an average population of around 1,500. The Index is a ranking tool showing relative rather than absolute deprivation. Most areas of Sandwell are relatively more deprived than other areas of England.

Nevertheless, Sandwell has numerous assets and opportunities to benefit significantly from action on climate change, including a thriving voluntary, community and social enterprise (VCSE) sector that has demonstrated its creativity, adaptability and value to the area during the Covid-19 pandemic. In addition, 24% of the borough is green space, and 12 Sandwell parks have won Green Flag awards as of 2019.

Fig. 2

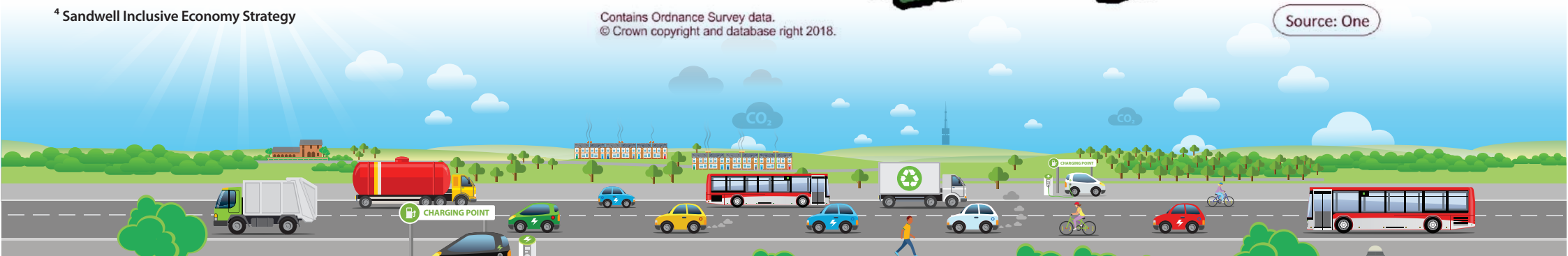
Map Index of Multiple Deprivation rankings by small area, Sandwell.



Contains Ordnance Survey data.
© Crown copyright and database right 2018.

Source: One

[4] Sandwell Inclusive Economy Strategy



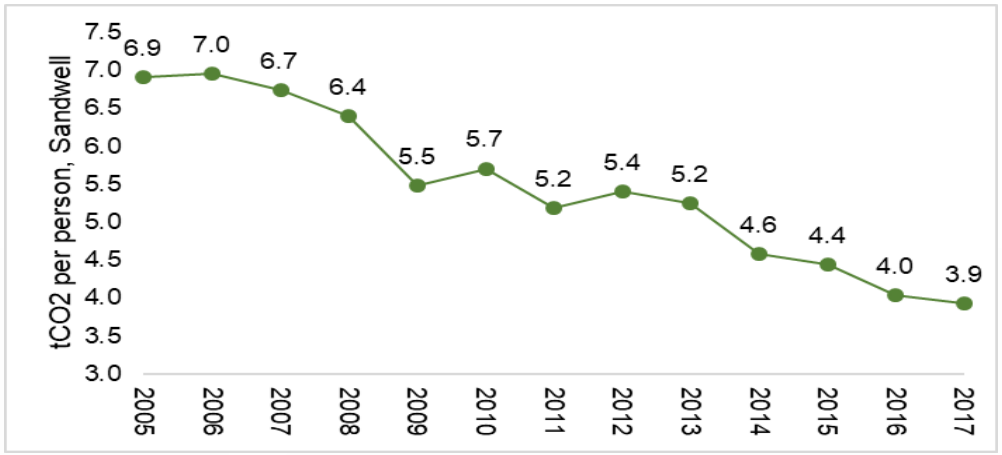
2 Background | 2.2 Sandwell context *(continued)*

The 2020-2030 Green Space strategy recognises the vital role Sandwell's trees and parks play in regulating air quality, providing drainage and cooling air.

Trees will also play a role in off-setting some of the residual emissions that cannot be eliminated before 2041, and towards this the Council has already committed to planting 15,000 trees, one for every new starter child in primary school, between 2020 -2022.

Finally, as a population in which almost 40% of households do not own a car, many in the population already have lifestyles with lower than average emissions who will benefit considerably from investments in walking, cycling and public transport.

Fig. 3 Sandwell per capita greenhouse gas emissions

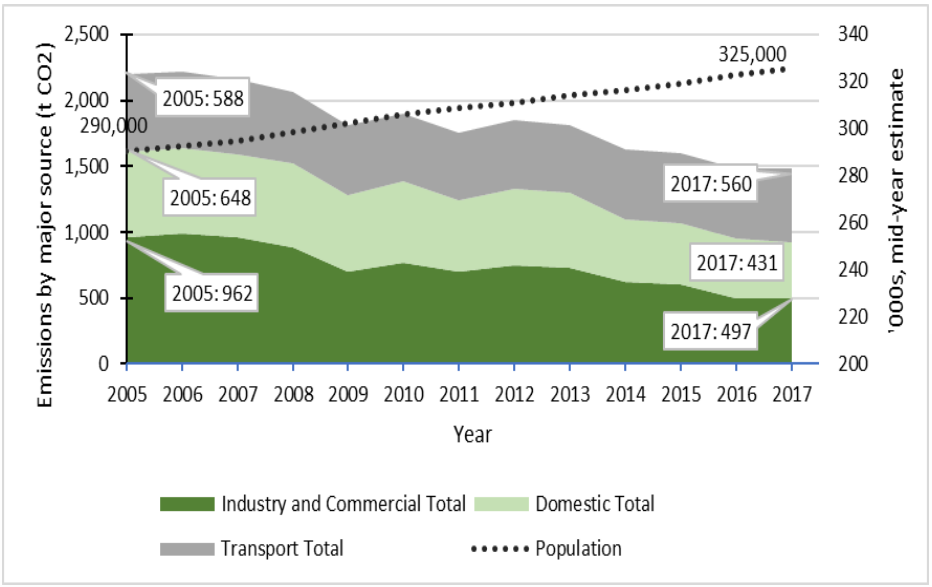


Source: BEIS, local authority scope 1 and 2 emissions [5]

Figure 4 below displays recent trends in carbon emitted in Sandwell, either by residents or as a result of through-traffic, by major emissions source between 2005 and 2017. The right-hand axis displays population growth trends.

Together these illustrate that Sandwell has achieved significant reductions in per person emissions from domestic energy and industrial and commercial sources over the last 15 years. However, transport emissions remain high, with 97.6% of transport emissions produced by road transport.

Fig. 4 Historic emissions by major source, Sandwell, 2005-2017



Source: BEIS, local authority scope 1 and 2 emissions and ONS mid-year population estimates [6]

2 Background | 2.3 Climate change and health in Sandwell

Health has been a central consideration when developing this strategy given our growing understanding of how much human health depends on the health of the planet and our natural environment. This strategy has also been developed during a period when Sandwell has been severely impacted by Covid-19, highlighting the need to strengthen local resilience to future health threats.

Healthy life expectancies in Sandwell are shorter than average for England at 57.1 years for men (63.1 in England) and 59 years for women (63.6 in England). Health and healthy life expectancy are put at risk by the impacts of climate change and air pollution, both directly and indirectly. According to the UK Climate Change Risk Assessment, the country will face increasing risk to the provision of vital goods and services provided by the natural environment, including food, water and wood, as well as threats to pollination of plants, natural flood defences and wildlife.

Extreme events, such as the winter storms seen in recent years, can cause the temporary loss of essential services and infrastructure in affected areas which all pose a greater risk to people who are already vulnerable.

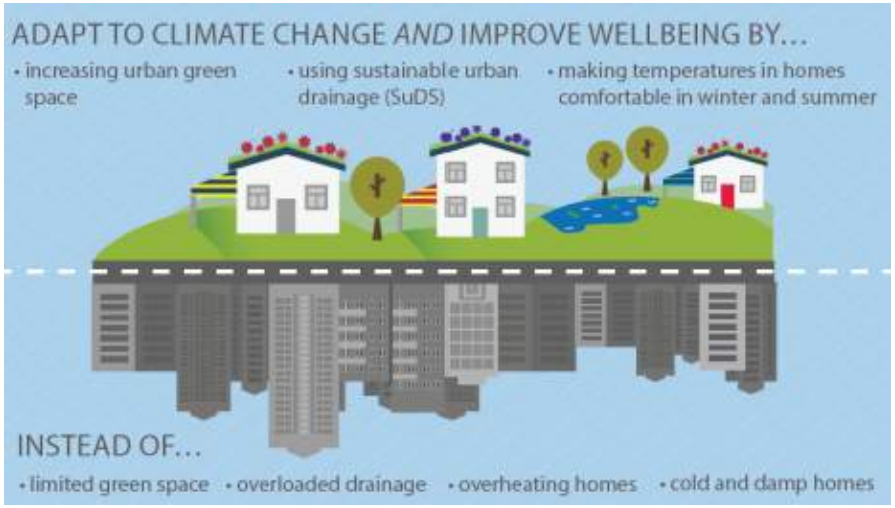
The number of people living in areas at significant risk of flooding is expected to almost double by the 2050s, whilst heat-related deaths n the UK are also expected to rise by 250% in that period, up to around 5000 per year. Longer-term, these effects will become more severe and more unpredictable, impacting both directly and indirectly on the area's utilities, supply chains and livelihoods.[6]

There are also many immediate health benefits to the action we take on climate change, such as improved indoor and outdoor air quality, reduced heat and cold stress, increased levels of physical activity, and reduced obesity.

[6] **Source data: BEIS, UK local authority and regional carbon dioxide emissions national statistics 2005-2017.**

These and other measures of health all stand to improve if we address many of the most significant drivers of climate change, including energy inefficient homes and buildings, road transport and consumption of foods with a large environmental impact such as red meat and palm oil. For example, it's estimated that in England, if current building regulations for ventilation were met, improved home energy efficiency could lead to 2200 quality adjusted life years (QALYs) gained per 10 000 people over 50 years, or an estimated additional 2.6 months in life expectancy per person.[7]

The graphic below shows some of the ways that in an urban area we can reduce emissions, adapt to climate change, and improve health and wellbeing at the same time.



[7] **Hamilton I, Milner J, Chalabi Z, et al. Health effects of home energy efficiency interventions in England: a modelling study. BMJ**

2 Background | 2.3 Climate change and health in Sandwell *(continued)*

Overhanging these longstanding concerns however, is the impact that Covid-19 has had on Sandwell, its residents and communities as this strategy has been developed.

Among the contributing factors, it is clear that deprivation and inequality explain much of the difference in disease outcomes between different groups.

Covid-19 will have a deep and lasting impact on many families, care homes and the NHS in Sandwell, whilst also affecting the business, jobs and livelihoods of many residents.

Nevertheless, Covid-19 has also demonstrated the strength of the community, with over 700 hundred residents coming forward to offer their time to the local volunteer coordination centre and many more doing so via newly formed mutual aid groups across the borough.

Covid-19 recovery in Sandwell:

We know that to resume a business as usual pathway as we recover from Covid-19 implies temperature increases of 3°C or more by the end of this century, implying much greater future uncertainty, instability and climate damages than experienced to date.[8] The impacts this will have on people already facing disadvantage highlights that future resilience demands we prioritise the health of those most at risk, now and in the future.

With low oil prices and pressure to restart the economy, there is a risk that the recovery will increase consumption of fossil fuels. Instead we need to participate fully in any forthcoming policy support for a Green Recovery and seek to ensure that new opportunities are compatible with meeting our local climate targets.

[8] Hepburn C, O'Callaghan B, Stern N (2020) Working paper no.20-02: Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Oxford Smith School of Enterprise and Environment.

2 Background | 2.4 Air quality and climate change

Sandwell is a borough-wide Air Quality Management Area (AQMA). Nitrogen dioxide concentrations have exceeded legal limits at seven air quality monitoring stations across the borough persistently over many years.

The Air Quality Action Plan (AQAP) 2020 is the Council's plan for ensuring emissions from transport are reduced in these hotspot areas within the timescale set by government.

There are clear synergies between reducing emissions of nitrogen dioxide (NO_2) and reducing emissions of greenhouse gases, as although NO_2 is not a greenhouse gas, it is produced by the same sources: notably transport, buildings, agriculture and industry.

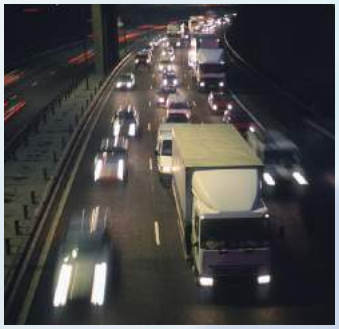
The health impacts of air pollution are more immediate than climate change, including impaired lung development in children, exacerbations of asthma, and increased risk of death from all causes and cardiovascular disease.

The health impacts of air pollution are more immediate than climate change

Exposure to air pollution is not evenly distributed, and people living next to busy roads are often on the lowest incomes, with the least means to avoid exposure, yet among the most exposed.

This Climate Change Strategy and the Transport Action Plan therefore cross-reference the AQAP and seek to lay the groundwork for an integrated approach. Notably, a borough-wide air pollution screening exercise found that mean roadside concentrations of NO_2 were high along many of the main roads in the borough and not only at the hotspots.

This evidence strengthens the case for taking a whole systems approach to encouraging and enabling clean forms of transport, all of which is outlined in the Transport Action Plan later in this document.



3 Aims, Objectives and Principles

Aims

In line with recommendations from the Tyndall Centre Analysis for Sandwell (see Box 1), Sandwell has adopted the following overarching aims:

1 **To reach carbon neutrality across all Council functions by 2030.**

2 **To reach carbon neutrality borough-wide by 2041.**

Objectives

The council will achieve these aims through implementation and further development of the Action Plan attached to this strategy.

This process will be enabled by a range of supportive activities and ways of working that cut across the delivery themes (see section 5.2) and include: communication and engagement; national and regional action; promotion of inclusion and skills; partnership working; evidence informed actions; and aligned with other key strategies and plans.

Box 1: recommendations of Tyndall Centre Analysis for Sandwell

For Sandwell to make its 'fair' contribution towards the Paris Climate Change Agreement, the following recommendations should be adopted:

- Stay within a maximum cumulative carbon dioxide emissions budget of **9.1 million tonnes** ($MtCO_2$) for the period of 2020 to 2100 (9,100 $KtCO_2$). At 2017 CO_2 emission levels, Sandwell would use this entire budget within **7 years from 2020**.
- Initiate an immediate programme of CO_2 mitigation to deliver cuts in emissions averaging a minimum of -13.4% per year to deliver a Paris aligned carbon budget. These annual reductions in emissions require national and local action, and could be part of a wider collaboration with other local authorities.
- Reach zero or near zero carbon no later than 2041.

At 2041 5% of the budget remains.

This represents very low levels of residual CO_2 emissions by this time, or Sandwell may opt to forgo these residual emissions and cut emissions to zero at this point. Earlier years for reaching zero CO_2 emissions are also within the recommended budget, provided that interim budgets with lower cumulative CO_2 emissions are also adopted.

Source: Tyndall Centre: Setting Climate Commitments for Sandwell [9]

[9] Available at: https://carbonbudget.manchester.ac.uk/reports/E08000028/ Accessed 20/05/2020

3 Aims, Objectives and Principles

There are several key principles upon which all of the Action Plan activities are based. Each principle helps to ensure that Sandwell MBC's response to the threats of climate change, means that all residents are considered and that their involvement and well-being lie at the heart of the whole Action Plan

Principle		What does this mean for Sandwell?
1	Fairness	We will ensure that the strategy distributes its benefits and costs in a way which decreases inequality and increase social justice.
2	Democracy	We need to maintain a democratic mandate for our actions.
3	Collaborative	We need to work with groups in the community and other institutions for input as well as vehicles for change.
4	Transformative	We will be proactive in identifying and acting on opportunities and will seek to influence the WMCA's policies and strategies
5	Learning	We will produce a dynamic strategy, that can be easily adapted to the inevitable developments of knowledge and science that will occur in the near future.
6	Evidence-Based	We will produce a strategy based on reliable and trusted science and resources.

4 Carbon reduction targets

This section summarises the current major emissions sources in Sandwell and recommended pathways to achieve the local targets.

4 Carbon reduction targets | 4.1 Emission categories

In carbon measurement and reporting tools, emissions are broken down into three scopes to better understand their source:

Scope 1

All Direct Emissions from the activities of an organisation or under their control, including fuel combustion on site such as gas boilers, fleet vehicles and air-conditioning leaks.

Scope 2

Indirect Emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy and eventually used by the organisation.

Scope 3

All other Indirect Emissions from activities of the organisation, occurring from sources that they do not own or control. These are usually the greatest share of the carbon footprint, covering emissions associated with business travel, procurement, waste and water.

4 Carbon reduction targets | 4.1 Emission categories *(continued)*

These scopes are displayed in Figure 5, which helps illustrate why all three scopes matter when trying to make an accurate assessment of the complete lifecycle emissions of products produced and consumed within the borough.

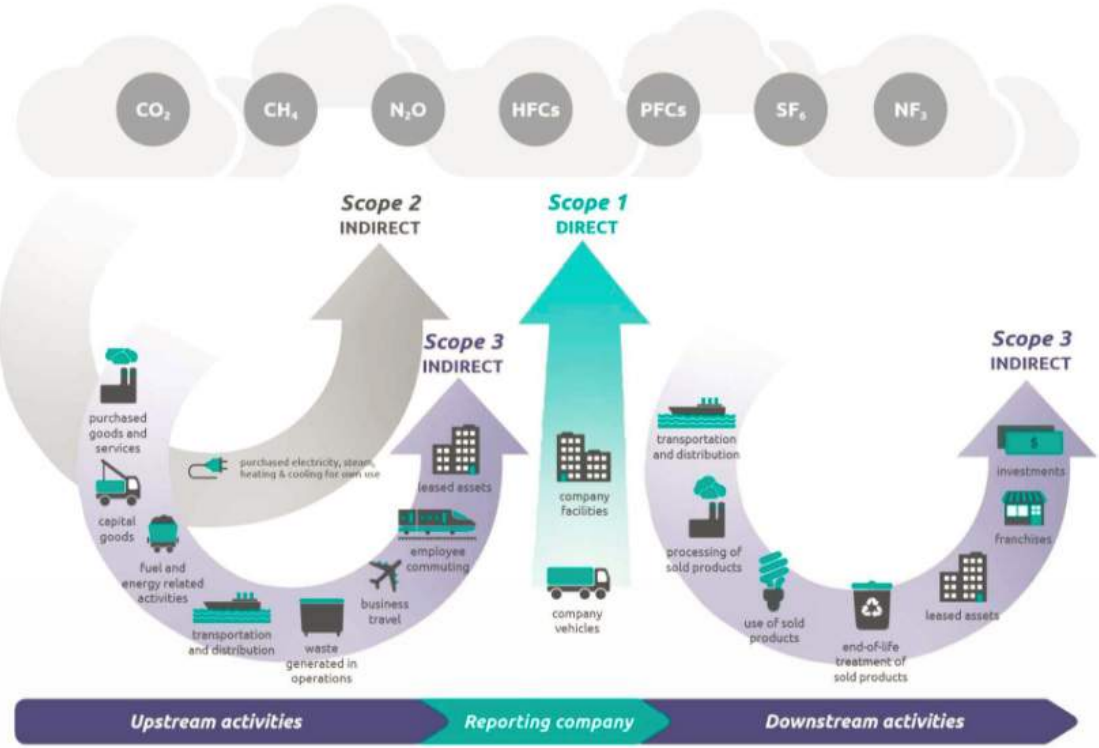
For example, whilst scope 1 emissions will measure the emissions from a company vehicle operating in Sandwell, it will not capture the emissions of the goods being transported except where those emissions are generated within the borough.

Most products rely on complex supply chains with emissions generated over the whole lifecycle of the product, from parts manufactured elsewhere, through to emissions from waste when eventually disposed of. Measuring all three emission scopes is therefore consistent with taking a science-based approach.

In England, however, emissions annual reporting by the Department of Business, Energy and Industrial Strategy includes scope 1 and 2, and only a small amount of scope 3 emissions.

Given these reporting standards and the methodological difficulty of estimating Scope 3 emissions borough-wide, the majority of this third category of emissions will be excluded from annual reporting.

Fig. 5 Scope 1, 2 and 3 emissions and what they measure



Source: GHG Protocol

4 Carbon reduction targets | 4.2. Sandwell's science-based carbon budget

The Tyndall Centre at Manchester University have recommended a science-based pathway to zero emissions for Sandwell.

This allocates a share of the global carbon budget to the UK based in recognition that high-income countries have higher per person and historical emissions and need to decarbonise faster than less developed countries.

The Tyndall Centre do not assume a significant role for technologies that enable us to capture carbon and store it, which would give us a larger emissions budget and longer time scale to reach net zero, but but do rely on technologies that do not yet exist at scale.

The steps taken to downscale the global carbon budgets to Sandwell involve taking the global carbon budget from the IPCC Special Report on 1.5°C and making various adjustments. This shows the share available to the UK, and from that, the share available to the WMCA area, and within that to each local authority. These steps are explained in detail in the Tyndall Centre's analysis for the WMCA area.[10]

The Tyndall approach notably requires steeper and deeper cuts in emissions than are likely to be feasible based on current technologies. Table 1 presents the carbon budget for Sandwell area recommended by the Tyndall Centre based on the cumulative emissions through to 2041.

This is the total budget per five year interval period, using periods based on UK Committee on Climate Change carbon budget periods.

[10] Tyndall Centre Analysis of Climate Change Pathways for the WMCA

Table 1. Tyndall Centre recommended carbon budgets for Sandwell

Carbon Budget Period	Recommended Carbon Budget (Kt CO2)
2018 - 2022	6100
2023 - 2027	3000
2028 - 2032	1500
2033 - 2037	700
2038 - 2042	300
2043 - 2047	200
2048 - 2100	200

The Tyndall Centre's modelled pathway to net zero does not take account of non-CO_2 emissions, but they do recommend that to reduce other greenhouse gas emissions (e.g. Methane, sulphur dioxide, nitrous oxide, hydrofluorocarbons and black carbon) the borough and wider region consider adopting a Land Use Change and Forestry pathway that includes CO_2 sequestration sufficient to help compensate for non-CO_2 emissions within WMCA.

4 Carbon reduction targets | 4.3 Sandwell's current emissions by source

In Sandwell, the two single largest sources of Scope 1 (direct) emissions are residential buildings and on-road transport, which includes emission from fuel consumption and grid-supplied energy for electric vehicles.

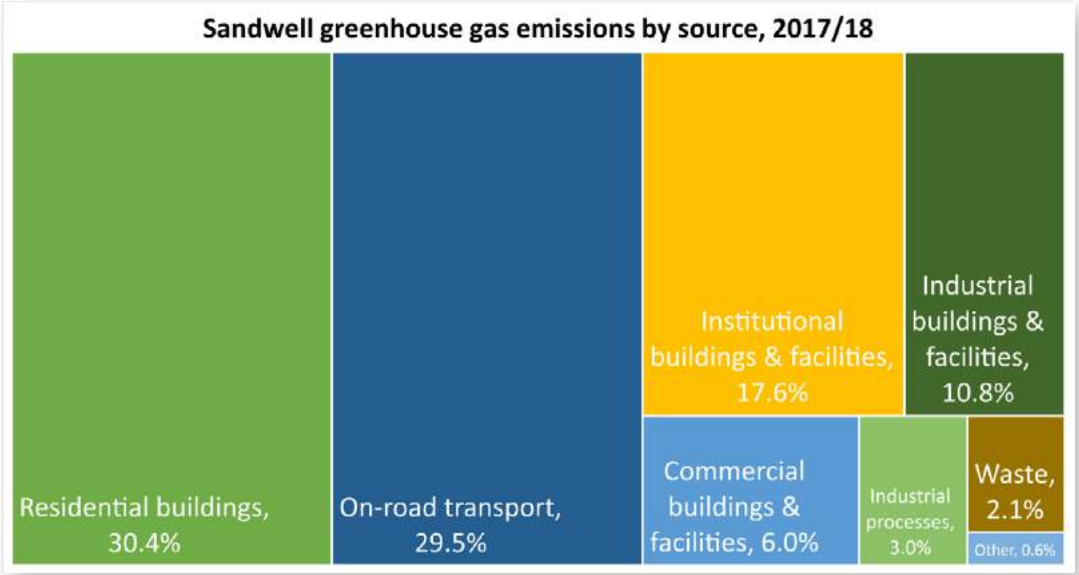


Fig. 6: Sandwell Greenhouse gas emissions by source, Scope 1 (direct) emissions only

Scope 2 includes indirect emissions that can be attributed to Sandwell due to electricity consumption.

This covers emissions from use of grid-supplied energy by buildings, equipment and facilities within the borough, as well as fugitive emissions from production, transformation and distribution of fuels.

Figure 7 displays the main users of electricity by source, showing that residential and institutional buildings account for most of the electricity consumed within the borough.

Worth noting however, is that all emissions from electricity consumed within the borough is roughly equal to the emissions from road transport (436.5 and 439.5KtCO2 respectively).

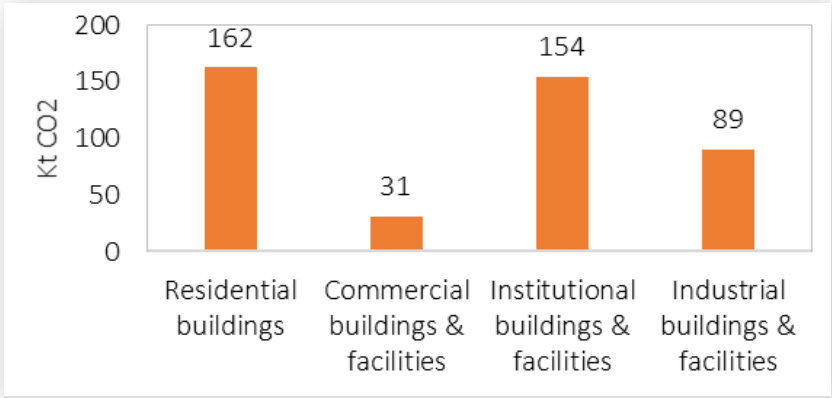


Fig. 7: Scope 2 (indirect, electricity) emissions by source, Sandwell.

4 Carbon reduction targets | 4.4 Alternative pathways to carbon neutrality

The Setting City Area Targets and Trajectories for Emissions Reduction (SCATTER) project (see Appendix 1) commissioned by the Department for Business Energy and Industrial Strategy (BEIS) developed a methodology for Local Authorities to set carbon emissions targets that will support achieving net-zero by 2050 using currently available technologies.[11]

For this strategy the SCATTER tool has been used to analyse current greenhouse gas emissions and their sources (see above), and model a realistic pathway to achieve our target based on currently available technologies.

SCATTER includes a function to model different pathways based on the level of ambition and the actions being taken.

A low/ base ambition pathway assumes that the council and borough go no further than national policy dictates and do not decarbonise electricity at a faster rate than the national grid.

The High Ambition pathway assumes that Sandwell exceeds national policy on both supply and demand measures and implements a range of interventions that are summarised below.

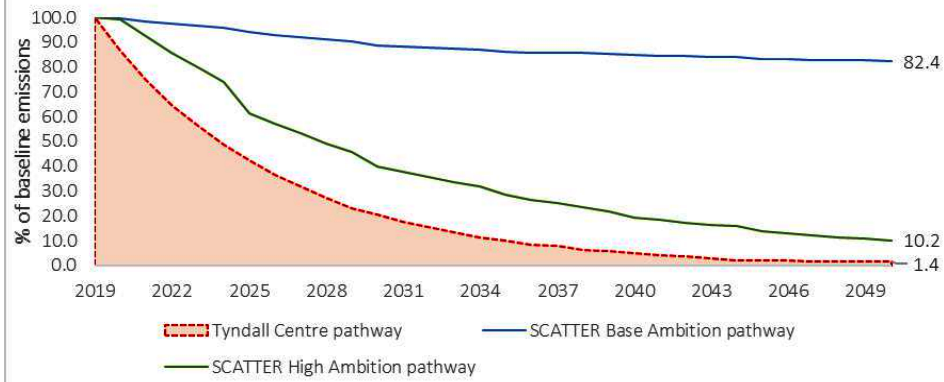
The difference in pathways is stark and demonstrates the challenge of meeting local targets without national policy support, with a 17.6% reduction in emissions by 2050 if Sandwell does nothing, compared with a 89.8% reduction if pursuing every available option for reducing emissions from all sources.

Importantly, the SCATTER pathways exclude most scope 3 emissions which are produced outside the borough, therefore to achieve reductions across all 3 scopes requires all other areas to pursue the same high ambition pathway as well.

Figure 8 presents the percentage emission reductions possible in pathways recommended using the Tyndall approach compared with those that could be achieved with low or high levels of ambition derived from SCATTER.

The complete set of actions recommended by SCATTER if following a high ambition pathway using currently available technology are presented in Appendix 1.

Fig. 8. Pathway comparison



Many critical factors to influence this pathway are beyond the scope of Sandwell and depend on national action. The SCATTER pathway also recommends that the region and Sandwell consider strategies for limiting growth that relies on aviation and shipping, as these are two major emissions sources that are not factored into the local carbon budget but which do determine the carbon budget allocation available to Sandwell if these industries expand nationally and encroach on the carbon budget elsewhere.

In Sandwell, whilst the Tyndall pathway presents a high bar of ambition for emissions reductions, the SCATTER tool suggests that even under the most ambitious pathway, in 2041 the borough will still be emitting around 22% of the baseline emissions in 2019. It is realistic to assume that offsetting will therefore be required to achieve the target of carbon neutrality by 2041 and eliminate these residual emissions.

[11] **Kuriakose, J., et al., Quantifying the implications of the Paris Agreement for Greater Manchester. 2018, Tyndall Centre for Climate Change Research**

4 Carbon reduction targets | 4.5 Climate Change Strategy Consultation

In early 2020 Sandwell Council conducted a consultation with residents and businesses and VCSE sector organisations in the borough.

The consultation covered the major emissions sources in Sandwell, including transport and buildings, and the actions required if we are to achieve our ambitions borough-wide. Surveys were completed by council staff, voluntary sector organisations and residents, who were reached via invitation emails, social media, news media, screensavers and business card distribution.

The online consultation received responses from 642 residents, whilst 15 face-to-face consultation events were also held. In total 787 people or organisations responded to the consultation.

Participants were drawn from across the borough. The consultation did not reach a fully representative sample however, and more work is needed to engage black and minority ethnic communities who formed only 12% of respondents despite making up almost 30% of the population.

Consultation results

Of 642 survey respondents, 90% agreed or strongly agreed that dealing with climate change should be a key priority for Sandwell, whilst 93.6% agreed or strongly agreed that improving air quality should be a key priority.

The survey spanned the sectors covered by the Climate Change Action Plan and full details are provided in appendix 3. On housing energy efficiency, consultation responses favoured making **higher energy efficiency standards** apply first to council owned and new build homes, with 57.6% and 47.4% responding that this was a priority respectively, with privately owned and occupied or tenanted homes a lower priority. This may reflect a perception that it is expensive to improve the energy efficiency of your own home.

There was strong support for **public transport and active travel** as mechanisms to reduce emissions from transport. Of ranked responses, almost 70% wanted increased investment in public transport, with just over 50% favouring investment in electric buses. Whilst **44% were keen to encourage more walking and cycling**, only 24.6% supported discouraging use of private cars in congested areas and only 7% increasing the cost of workplace parking.

Almost two-thirds of respondents favoured increased use of **renewable energy and investment in energy efficiency** measures to reduce emissions from buildings. The preference was for these 'high impact' investments over behavioural interventions such as encouraging energy saving behaviours and reducing paper usage.

Regarding general lifestyle related emissions of residents, 69.1% of respondents considered **waste reduction** a priority and 64.9% considered **recycling** a priority, whilst almost half (46.5%) favoured **reducing unsustainable travel**. However, only a small minority favoured two actions that will be essential to meeting our climate targets – changing diets (22%) and shopping locally (21.2%) – suggesting that further work needs to be done to engage the community on these issues and develop solutions that work with the culture and values of our residents.

5 Governance and Approach

As we develop the system of governance for this strategy and action plan the Council will be guided by the following aims:

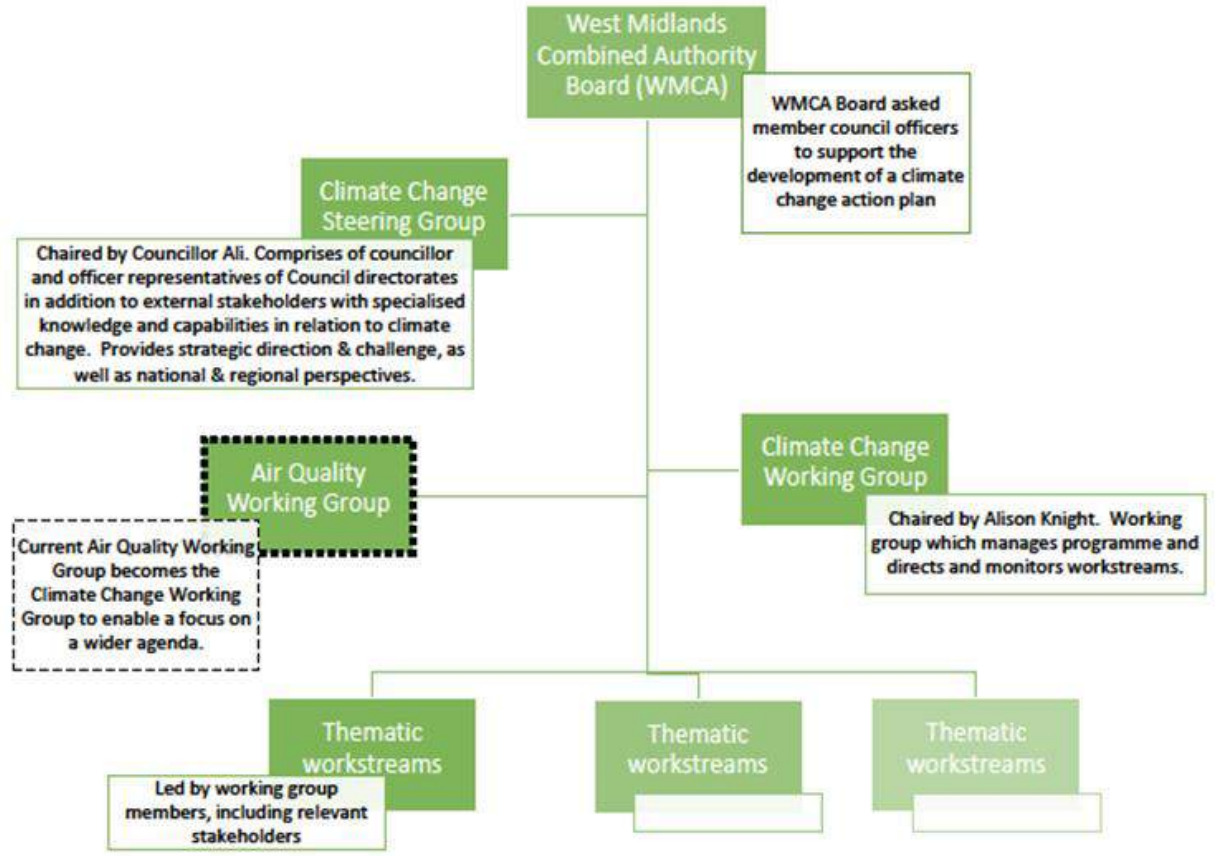
1. To continue to consult with, inform and as far as possible involve residents and businesses in decisions about how we develop and implement Sandwell's Climate Change Action Plan.

2. To establish a system of Climate Change Strategy governance in partnership with public, private and community organisations and implement a system for monitoring and reporting progress against the action plan.

Sandwell's Climate Change Action Plan will require high-level strategic governance alongside more detailed routine monitoring and reporting of progress against the action plan.

Figure 9 opposite, presents the Climate Change Strategy governance arrangements, which may change as the action plan is implemented.

Fig. 9: Climate Change Strategy Governance structure



5 Governance and approach | 5.1 Monitoring and reporting

Currently the Member Steering Group is the overarching governance structure, with an Officer Working Group spanning multiple departments which develops proposals that are submitted to the Member Steering Group for ratification. Monitoring of individual projects will be undertaken by council officers and project leaders and reported to regularly via the Officer Working Group.

As the Action Plan is implemented and updated, new initiatives will continue to be submitted to the Member Steering Group and where needed, to Cabinet for approval.

Contributions of actions and interventions to the climate change and air quality targets will be monitored and reported to ensure that positive contributions are made to the WMCA target and the agreed role which Sandwell will play in meeting this target.

5 Governance and approach | 5.2 Next steps

At both a strategic and action planning level, with our communities we will look to build on the consultation and the existing Youth Assembly and develop initiatives such as a Climate Assembly or equivalent forum for engaging with interest groups, communities, local and national partners and elected members to consider progress and ideas for actions.

One of the first steps towards the above will be to develop a system for working with local businesses, either collectively or in series of partnerships, that will consider and adopt additional interventions required to achieve net-zero from the major industrial and commercial sources. Businesses also play a vital role in supporting low carbon lifestyles and energy generation and will be central to efforts to achieve the borough-wide net-zero target of 2041.

Annual monitoring reports will be prepared for the Members Steering Group outlining progress on action plan projects. For the Covenant of Mayors requirements, a more in-depth report will be produced biannually using the SCATTER tool provided for this purpose, combined with data on all actions to date and the quantifiable reductions in carbon emissions where possible.

The action plan highlights the initial steps we will be taking towards these ends. However, we cannot be sure what the future of our energy or transport systems will look like, given emerging technologies and to an extent the lasting impact of Covid-19. To ensure uncertainty is taken into account, we will review progress regularly and evolve the plan as new opportunities emerge.

5 Governance and approach | 5.3 Enabling whole-systems change in Sandwell

As is clear from the pathways and target, the window of time available to act on climate change is narrowing fast: the more we delay action the more steep and dramatic the cuts in carbon emissions will need to be when we do act.

To achieve Sandwell's ambitions, it will not be sufficient to work within the existing systems and processes.

A whole systems approach will be crucial to realign all working parts of the Sandwell ecosystem towards this carbon-neutral vision. This is essential to ensure that action in one part of the system does not lead to negative feedback and adaptations elsewhere.

The following supportive ways of working will be essential in enabling this.

5.3.1 Communication and engagement

Sandwell Council have consulted widely with individuals and organisations in the development of this Strategy and Action Plan and have established the strength of public support for action.

In the free text section of the consultation, 21% of respondents spontaneously raised the need for greater education and engagement. To achieve Sandwell's ambitious targets requires a shared understanding that we both impact and rely on the natural environment for reasons detailed in the section on health and climate change.

In Sandwell there will be many people leading low carbon lifestyles already, not always for environmental reasons, and the council and partners will need to involve those individuals and communities, learn from them and ensure that they also benefit from green investments made within the borough.

This can build on a diversity of current activities, such as community food growing and local energy generation, which, if sustained and scaled up, could help us achieve our targets. This will involve working alongside organisations, groups and individuals already active in their communities to give them permission and some support to make the changes that they can see will make a difference in their area.

To meet the targets, it will be essential to enable and support further action and the council will seek to develop a communication and engagement plan to do so. To facilitate this, SMBC will explore options such as creating an online platform where residents can map problem areas and suggest solutions.

There are other existing participation mechanisms, such as the Sandwell Youth Assembly, and learning from these can be used to develop a model of participation in climate actions at a place-based level.

The council will seek to support, where possible, initiatives led by residents, groups and organisations in Sandwell that will contribute to achievement of the borough-wide carbon targets.

5.3.2 National Action – infrastructure and investment

The Tyndall Centre recommend that whilst Sandwell can seek to deploy low carbon electricity generation locally, they should also seek to influence national policy and how electricity is produced for the national grid.

Many of the changes we need to see require major infrastructure investment locally, for example to move towards decarbonised home energy or to improve new build standards.

To achieve this will require a shift in the incentives and regulations that apply. This cannot be achieved with current local powers and will require Sandwell Council and partners to advocate for regulatory, policy and financing changes that make climate friendly decisions economically and politically viable as well.

Specific policy areas developed nationally and regionally which can influence the management of emissions include:

- **National Planning Policy Framework**
- **Black Country Plan (formerly the Black Country Core Strategy)**
- **Sandwell Council's planning and transportation policies as set out in the Local Plan (Black Country Core Strategy, Site Allocations & Delivery Plan, SPDs)**
- **Sandwell Council's Development Management & Building Regulations Service**
- **WMCA Housing and Health design principles and WMCA Design Charter**
- **Policies and strategies developed by Transport for West Midlands.**

Sandwell Council will seek to advocate as a council and as part of the wider Black Country region, and support local stakeholders to connect with decision makers regionally and nationally to influence where and how decisions are made that affect Sandwell.

5.3.3 Inclusion and skills

Sandwell Council will seek to recruit locally for any newly created opportunities. As well as financial investments, Sandwell will therefore also require a workforce trained in the skills needed. This will mean working with training providers in the borough and wider region to ensure that training is available and connecting local people with the training and work opportunities that arise from it.

Sandwell Council will seek to develop a skills and training delivery plan for the climate action plan, covering school curricula and adult learning and development opportunities, including further education, apprenticeships and job roles across the six delivery themes.

The council will include climate change training as part of our induction process for new staff to consider their personal and work-related emissions and how they can contribute to meeting our climate targets.

We will work with a wide range of organisations to ensure we are all delivering the same messages to our staff and stakeholders.

5 Governance and approach | 5.3 Enabling whole-systems change in Sandwell *(continued)*

5.3.4 Partnership working

The council recognise that as its own carbon footprint is only around1% of the borough's total emissions it is vital to bring together the full spectrum of businesses and organisations who need to lead on delivering on this action plan to come up with an approach for dealing with the other 99% of emissions.

There are several models for doing this and the council will build on existing partnerships and links within the borough to develop the most effective approach for reducing the borough's emissions, whilst also delivering;

- improvements in public health

- reduce costs for public services

- improved air quality

- increases in job and economic opportunities

- greater community engagement

- an enhanced natural environment

Internal partners necessary to involve for the Council's own 2030 target include the Health & Wellbeing Board, Planning, Transportation, Highways, Housing, Education and Facilities management.

5.3.5 Evidence informed

This strategy and the linked action plans will seek to draw on the latest evidence regarding emissions sources and how to reduce them.

The council will seek to be informed by evidence that clearly applies best to Sandwell and its residents, bearing in mind wider health and inclusion considerations to maximise the wellbeing of the community.

The evidence for interventions is not fixed and will change over time. To meet the targets will require on-going learning from all involved to overcome challenges and respond to new research, technology and opportunities.

5.3.6 Aligning with other key strategies and plans

For this strategy to be deliverable it needs to align with and ensure other strategies are mutually reinforcing. In 2018 Sandwell Council adopted a Vision for the borough in 2030 that spanned all key council functions. Sandwell's Vision 2030 is wide ranging and multisector with 10 overarching ambitions spanning health, education, businesses and community development among others. Each of the ambitions included in Sandwell's 2030 Vision can be linked to this strategy, thereby enabling it to influence other plans and strategies that guide the Council's operations and how its services are delivered. Appendix 2 presents the list of Ambitions in Vision 2030 and how these relate to the Climate Change Strategy.

Linked to the Vision, Sandwell's Inclusive Economy Strategy recognises that some groups are at risk of being excluded from the benefits of local economic activity. Sandwell has a higher than average proportion of working age residents who have no formal qualifications (32.3%, compared with a national average of 18.4%). The need to ensure everyone benefits from local investment can go hand in hand with the need to deliver investments based on this strategy, but this is not inevitable, and we will seek to ensure that opportunities created from these actions reach those with the most potential to benefit.

Other strategies considered in the Action Plan attached to this strategy include, but are not limited to:

- **The Strategic Transport Plan – Movement for Growth**
- **West Midlands Low Emissions Trains and Cities Project**
- **Sandwell Community Wealth Strategy**
- **Sandwell Green Space Strategy 2020-2030**
- **Sandwell Strategic Plan for Assets**
- **Corporate Plans**
- **The Sandwell Air Quality Action Plan**
- **Stronger Sandwell: the council's approach to ensuring procurement decisions favour locally run organisations.**

6 The Climate Change Action Plan

We have set out six delivery themes for Sandwell to deliver our vision.
These represent our baseline commitment to maximising opportunities and responding to the challenges of reaching our carbon neutrality target for the council by 2030 and for the borough by 2041.

Over time as we develop partnerships and engage further with our communities we plan to keep raising the level of ambition, so these actions by no means represent all the steps required to achieve carbon neutrality.

Each section of the action plan includes a brief background, progress to date, future ambitions and immediate actions for that service area.

1. **Council estate and operations**
2. **The built environment**
3. **Transport**
4. **Waste**
5. **Adaptation**
6. **Natural Capital**

Action Plan 1
Council estate and operations

Action Plan 1
Council estate and operations

Corporate Carbon Emissions

In line with reducing emissions across the borough, the Council recognises the significance of its own carbon emissions. Although these only account for a small percentage of Sandwell's total carbon emissions they are an area in which the council can have the most control and influence. In recognition of this and in order to help mitigate its own contribution to Climate Change, the Council has committed to its Scope 1 & 2 emissions being carbon neutral by 2030.

In line with standard methodology for greenhouse gas reporting, the council's own carbon footprint is broken down into three categories or Scopes with the data below from 2019.

Scope	Details	Equivalent tonnes Carbon Dioxide (tCO_2e)
Scope 1	Direct emissions from buildings and fleet including emissions from heating buildings and driving fleet vehicles.	10,489
Scope 2	Indirect emissions from purchased electricity, steam, heating and cooling for own use.	9,841
Scope 3	Indirect emissions from council operations.	Not included

Table 2: summary of Scope 1& 2 emissions

Action Plan 1
Council estate and operations

Carbon Footprint Boundaries

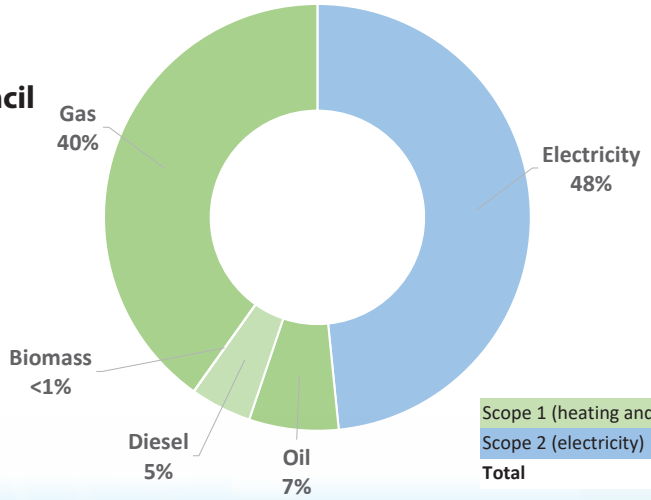
Scope 1: Direct emissions from the combustion of gas and other fuels. These are emissions produced directly as a result of the Council's operations and includes gas and oil use within operational buildings, such as office space, libraries, schools and leisure centres where we are directly responsible for the maintenance. Scope 1 emissions also includes fuel use from fleet vehicles. Fugitive emissions from air conditioning systems will be included from 2020 with systems being put in place to ensure the data can be accurately recorded.

Scope 2: Indirect emissions from electricity generated off site. This is electricity used by our buildings, including the main communal supplies for landlord provisions that do not feed domestic properties, street lighting and also any fleet electric vehicles.

Scope 3: Emissions are other indirect emissions but which are outside of our direct control. Examples of scope 3 emissions include those from business mileage; waste; water or the supply chain when the council procures goods or services. Scope 3 emissions are not included in the 2030 target but specific sources of CO2 may be monitored and reported on in future as data becomes available.

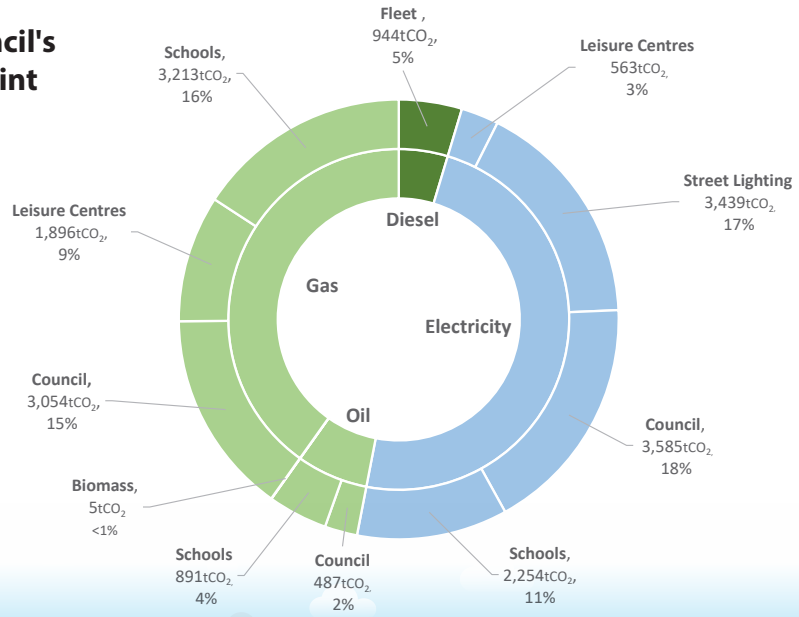
Emissions from Scope 1 & 2 are broken down further in Fig. 10 and Fig. 11

Fig. 10: Sandwell Council Scope 1 & 2 emissions



Scope 1 (heating and fleet)	10,489tCO$_2$
Scope 2 (electricity)	9,841tCO$_2$
Total	20,330tCO$_2$

Fig. 11: Sandwell Council's Carbon Footprint



Action Plan 1
Council estate and operations

Progress to date

Over the last 10 years the council has made significant strides in reducing its own carbon emissions. This can be seen in Fig. 12 below* which shows how CO_2 emissions by the council have reduced from over 27,500tCO_2 in 2009/10 to 12,200t CO_2 in 2018/19, representing a reduction of more than 50%. As emissions can be reduced by factors including the carbon factor of the national grid or through a change in building stock, looking at the average rating for Display Energy Certificates (DECs) in our buildings has also been used to monitor change.

Over the last 10 years a steady reduction has taken place with the average rating improving from an E120 to a D100 as can be seen in Fig. 13 below.
Whilst there has been a significant improvement there is still much more that can be done.

Fig. 12

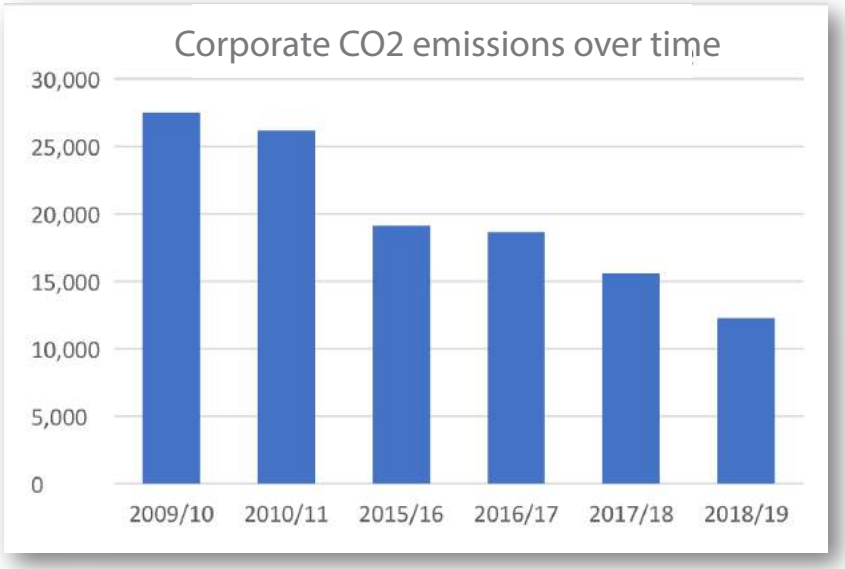
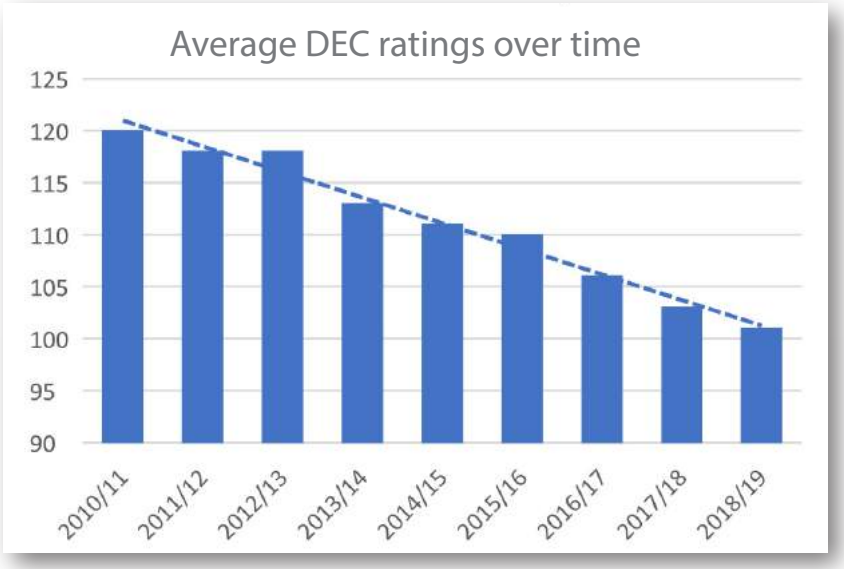


Fig. 13



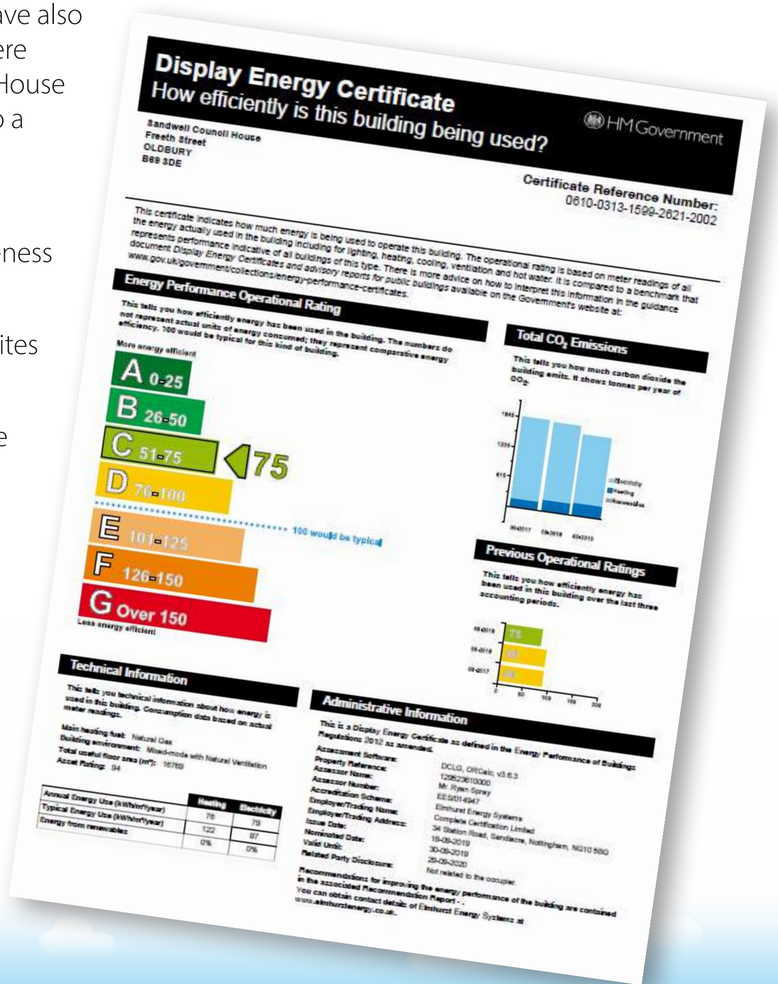
*** The figures used in the above reporting are calculated using a different methodology to the carbon footprint report and do not include for example, schools or emissions from fleet vehicles. The figures should therefore be seen as indicative of the reduction in emissions and not used for direct comparison.**

Action Plan 1
Council estate and operations

Projects to date

The savings delivered so far have been achieved through a wide range of energy saving projects and have also made use of funding schemes such Salix to allow additional energy savings measures to take place where resources would not have normally been available. The Display Energy Certificate for Sandwell Council House shows the effect from some of these measures. It has improved from a DEC rating of G197 in 2010 up to a rating of C75 in 2019. Examples of the improvements made to date include:

- A rolling programme of upgrading heating systems, improving distribution pipework and changing from oil fired systems to gas.
- Upgrading and expanding the use of building energy management systems (BEMS); moving from modem based technology to more reliable wireless M2M systems.
- Replacing older lights fittings with LED lighting in a large number of properties across the estate, including schools, leisure centres admin buildings and housing.
- Replaced over 4,000 street lights to date with a further 7,000 scheduled for replacement over the next two years.
- Use and optimisation of CHP systems in new leisure centres.
- Improvements to and addition of insulation across the estate, including pool covers, pipe lagging etc.
- Improved communications with staff and sites around heating requirements and timetables.
- Purchasing of a monitoring and targeting software package to facilitate greater awareness and control of energy use.
- Bill validation and increased liaison with sites on reductions to gas or electricity use.
- Upgrading of air handling units to include high efficiency motors and CO2 sensors to control fan speeds.
- Increased communications between key personnel around behavioural change and opportunities for energy savings.
- Increased monitoring and rationalisation of ICT servers in addition to upgrades to thin client and laptops.
- Transformation of the two computer suites and infrastructure at Sandwell Council House.



Display Energy Certificate
How efficiently is this building being used?
HM Government
Sandwell Council House
Freeth Street
OLDBURY
B69 3DE
Certificate Reference Number:
0610-0313-1599-2621-2002

Energy Performance Operational Rating
A 0-25
B 26-50
C 51-75
D 76-100
E 101-125
F 126-150
G Over 150
75
100 would be typical
Total CO_2 Emissions
Previous Operational Ratings
Technical Information
Administrative Information

Action Plan 1
Council estate and operations

Actions to achieve aims and objectives

The action plan presented below does not represent all actions that will need to be taken but is instead the next step in building on our previous carbon savings.

Objective	Action	Responsibility	Timeframe
1.1 Reducing energy use in buildings	Complete a review of all non-domestic corporate properties and schools, identifying opportunities where solar PV might be installed.	Urban Design & Building Services	Short Term
	New commercial properties acquired by the council are to have an EPC rating of C or higher.	Strategic Assets & Land	Short Term
	Include building EPC and energy efficiency as a primary metric in future property reviews.	Strategic Assets & Land	Short Term
	The refurbishment or renovations of corporate buildings will aim to achieve an EPC rating of C or above.	Strategic Assets & Land	Short Term
	Streamline and increase the use of finance schemes such as Salix to accelerate carbon reduction improvements.	Urban Design & Building Services	On-going
	Reduce energy demand from properties through the use of retrofit measures such as improved insulation, upgrading lighting or more efficient equipment.	Urban Design & Building Services	On-going
	Any retrofit of heating systems should include a cost benefit analysis of low carbon technologies or heat networks where available.	Urban Design & Building Services	On-going
	Introduce smart energy management systems to help reduce energy use, including AMR and access to historic and half hourly data where practical.	Urban Design & Building Services	Short Term

Action Plan 1
Council estate and operations

Actions to achieve aims and objectives (continued)

Objective	Action	Responsibility	Timeframe
1.2 Improving the efficiency of street lighting	Continue with existing programme to upgrade 11,000 low pressure lamps to LED over a 3 year period.	Highways	Ongoing
	Upgraded LED lamps to continue the strategy of dimming and trimming where viable.	Highways	Ongoing
	Follow upgrade of SOX lanterns with a review of opportunities and finance mechanisms to upgrade all high pressure sodium lamps to LED.	Highways	Medium Term
Objective	**Action**	**Responsibility**	**Timeframe**
1.3 Reducing carbon emissions through procurement	Social value metrics will be updated to allow increased use of carbon reduction and climate change in future procurement exercises where appropriate.	Procurement	Short Term
	Investigate opportunities for the additional promotion of carbon reduction such as mandatory carbon reporting by contractors.	Procurement	Short Term
	Review mechanisms to embed sustainability into the council's decision making process.	Democratic Services	Short Term

Action Plan 1
Council estate and operations

Actions to achieve aims and objectives (continued)

Objective	Action	Responsibility	Timeframe
1.4 Increase efficiency of ICT	Cloud based servers, improved equipment.	ICT	Ongoing
Objective	**Action**	**Responsibility**	**Timeframe**
1.5 Reduce carbon emissions from fleet vehicles and business mileage	Develop a plan to roll out electrification of Council fleet vehicles.	Waste & Fleet Services	Short Term
	Update the existing 'Workplace Vision Travel Plan'; investigate options to reduce carbon emissions from staff commuting or business travel from e.g car sharing or 'staff pool bikes' and increase awareness of available options.	Workplace Vision Project Board	Short Term
Objective	**Action**	**Responsibility**	**Timeframe**
1.6 Assess opportunities from Waste & Recycling	Review existing waste collection and recycling services and identify opportunities for to reduce emissions in line with principles of reduce, re-use, recycle.	Waste & Fleet Services	Short Term

Action Plan 1
Council estate and operations

Actions to achieve aims and objectives (continued)

Objective	Action	Responsibility	Timeframe
1.7 Support staff in reducing emissions through behavioural change	Develop an advocacy scheme and offer training to staff, increasing awareness of how to reduce carbon emissions and environmental impacts.	Climate Change Programme Manager	Short Term
	Investigate options of subsidies to support staff use of public transport.	Workplace Vision Project Board	Short Term
	Support schools in reducing their energy use and environmental impacts through behavioural change and awareness campaigns.	Urban Design and Building Services	Short Term
	Explore the opportunities for increasing the take up of smart/homeworking across the council.	Workplace Vision Project Board	Short Term
Objective	**Action**	**Responsibility**	**Timeframe**
1.8 Finalise governance arrangements	Investigate the feasibility of establishing an over-arching mechanism for the implementation of this Strategy across the borough.	Neighbourhoods	Short Term

Action Plan 2

The Built Environment

Action Plan 2
The Built Environment

Introduction

Sandwell's industrial heritage has left it with a densely populated built environment; a complicated mixture of domestic properties, commercial activities and the public estate. Fuel poverty is a significant issue in many areas (this is largely driven by the quality of existing housing and the income of residents). Sandwell, is amongst the worst 10% of UK local authorities for incidence of fuel poverty.

In the case of domestic energy costs, the annual spend on energy is significantly higher than elsewhere because of the poor overall quality of domestic buildings. This is a perennial challenge, but one of increasing urgency as the search for cost-effective and socially acceptable responses to the challenge of climate change gathers pace.

Action Plan 2
The built environment

Council Homes

For some years we have been carrying out energy efficiency improvements to the Council's own stock, including double glazing, loft insulation and cavity wall insulation.

We start by insulating first and making sure the properties are properly draught-proofed. Once these elements have been completed, we consider more expensive energy efficiency solutions. In practical terms, this means most of our properties with suitable lofts and cavities have now been insulated and we have also applied external insulation to some of our high-rise buildings and solid wall houses.

Recognising the inevitable demise of natural gas as an energy source, we are looking to include more renewable energy technologies into the design of new-build council homes and high-rise refurbishment schemes.

This includes on-going studies exploring the potential for heat networks utilizing, where possible, heat recovery from renewable sources, such as Energy from Waste facilities, canals and redundant coal mines.

Whilst CO_2 reduction figures emissions for Sandwell are in line with those for the West Midlands, fuel poverty rates have increased significantly since 2014.

To help address this, we have recently undertaken a Warm Homes Funded project for the installation of first-time wet central heating systems and replacement of outmoded electric storage heaters with more efficient gas wet central heating systems. This area-focussed project has successfully included both Council and privately-owned dwellings.

Private Sector Homes

In terms of energy efficiency, it is generally recognised that much of the private sector housing stock in Sandwell is of poor quality. This includes a large proportion of pre-1930's terraced with solid walls which have suffered from lack of investment and an on-going trend to be used as rented accommodation.

The Citizen and Consumer Protection (Accommodation) Team respond to complaints regarding disrepair within the Private Rented Sector. As part of the investigation the EPC is checked and any remedial works required to improve energy efficiency are requested and enforced as necessary. Since 1 April 2020, landlords can no longer let or continue to let properties covered by the MEES Regulations if they have an EPC rating below E, unless they have a valid exemption in place.

Landlords that apply for licensing of HMO properties should expect to have a condition in the licence that properties must have a minimum EPC rating of E before occupation.

Sandwell has recently undertaken a consultation exercise regarding the implementation of selective and additional licensing within the West Bromwich area. If approved these schemes will be enforced within an area of the borough where private rented stock is known to be in poor condition. Licence conditions will be included to ensure minimum energy standards are enforced.

Action Plan 2
The built environment

The Black Country Plan

The Black Country Plan (2023 to 2038), is currently being developed, includes a range of policy aspirations for high quality design and climate change mitigation and adaptation. As set out in national guidance, an effective way of ensuring these aspirations are delivered in a consistent manner is using tools for assessing and improving design quality. The Building Research Establishment (BRE) administers a range of robust, national standards which can support this approach. BREEAM standards are well established and the new Home Quality Mark (HQM) standard is based on the BREEAM approach. Both BREEAM and HQM certify quality and sustainability in the built environment, including running costs, health and wellbeing and environmental impact. The Council welcomes developers using these, or similar tools to support their designs.

Businesses

The Black Country has ambitious plans to develop a High Value Manufacturing City alongside 40,000 new homes and other infrastructure improvements, in line with the Smart City concept. Sandwell has a potential competitive advantage over other regions in that its industrial heritage has left it with a reasonable energy distribution infrastructure with some spare capacity. It also has a relatively dense and diverse concentration of energy demand.

These characteristics mean that it is highly likely that attractive commercial opportunities exist for investments in local power generation facilities which offer energy intensive industries lower cost, more secure power (while also creating local employment and offering economic opportunities).

For example, gas turbines could be used to generate electricity at MW scale (suitable for energy-intense manufacturing) with heat that would otherwise have been wasted used locally to provide low cost process and space-heating heat for nearby commercial buildings and/or housing.

A key issue is energy costs for industry, which are sometimes up to 44% higher than in competitor economies. New connection costs can also act as a constraint on expansion. It is likely that continuation of the current market design which does not recognize a strategic role for regions will result in higher costs for customers and constrain our ability to deliver carbon and/or fuel poverty targets.

The Black Country LEP is playing a leading role in this debate nationally, leveraging the power of working together with the other two West Midlands LEPs and the Mayor to access government at appropriate levels.

Action Plan 2
The built environment

The Inclusive Economy

We are committed to building a strong economy with a focus on "inclusive growth" that helps all of Sandwell's residents to benefit and enable us to tackle the root causes of poverty currently experienced across our borough.

An Inclusive Economy is one in which there is expanded opportunity for more broadly shared prosperity especially for those facing the greatest barriers to advancing their well-being.

The positive impacts of an Inclusive Economy on Climate Change could be significant. Sandwell's aim is to develop a thriving economy where local people are provided with an opportunity to benefit from economic activity in the borough.

One concept we are actively promoting is the is the "Circular Economy". This encourages the use of locally obtained materials to feed manufacturing processes and wherever possible these materials should be from a sustainable or re-cycled source.

Several Sandwell based SME's have joined forces to innovate and re-think Climate Change impact through using circular procurement and leading-edge regenerative design when tendering for £multi-million contracts on cross-regional construction projects in the West Midlands.

Action Plan 2
The built environment

Objective	Actions Sandwell Council can take	Timescale
2.1 Ensure a transition to more eco-friendly homes	Incorporate more renewable energy measures into the design of new-build Council homes including modern methods of construction.	Short Term
	Ensure procurement processes consider Climate Change as part of tender assessments for all contracts (new-build/ maintenance/refurbishment).	Short Term
	Progress On-going studies around the development of Heat Networks.	Medium Term
	Gain a better understanding of EPC ratings across all tenures.	Short Term
	Improve the EPC ratings of Council stock by investment in energy-efficient improvements.	Long Term
	Continue partnership involvement with energy-saving schemes for residents (Local Energy Advice Partnership, ECO3 Flexibility, fuel switching etc).	Long Term
	Encourage private sector residents/landlords to carry out energy-efficient improvements to homes using grants and schemes where eligible.	Long Term
	Work with the Combined Authority to influence the design of new buildings and lessen the carbon impact of supply chains.	Medium Term
	Actions residents can take	
	Actively uptake grants/schemes to improve energy- efficiency of homes.	Medium Term
	Consider Climate Change implications when planning improvements to homes.	Medium Term
	Undertake regular fuel-switching utilizing the Council's service or price comparison sites.	Short Term
	Use less gas and electricity.	Short Term

Action Plan 2
The built environment

Objective	Actions businesses can take	Timescale
2.1 Ensure a transition to more eco-friendly homes	Businesses involved in building and maintaining homes should consider the carbon footprint of their supply chain.	Medium Term
	Construction companies should regularly review their materials/products to ensure they are as environmentally friendly as possible.	Medium Term
	Actions partners can take	
	Follow the Council's lead regarding Climate Change.	Long Term
	Inform the Council of any innovative schemes or projects being undertaken elsewhere.	Long Term

Action Plan 2
The built environment

Objective	Actions Sandwell Council can take	Timescale
2.2 To reduce emissions from businesses	Work with businesses to promote Climate Change priorities.	Short Term
	Encourage businesses to talk to one another and share good practice/ideas.	Short Term
	Consider a scheme whereby businesses supporting the green economy are recognised as such.	Medium Term
	Develop a platform that enables local businesses to interact with each other to support the local 'Circular Economy'.	Short Term
	Actions residents can take	
	Aim to purchase goods and services from local companies that support the Green/Circular Economy (see above).	Medium Term

Action Plan 2
The built environment

Objective	Actions businesses can take	Timescale
2.2 To reduce emissions from businesses	Introduce advanced manufacturing techniques.	Medium Term
	Introduce procurement processes that consider Climate Change/carbon footprint for supply of goods and services.	Medium Term
	Encourage innovation.	Medium Term
	Consider the introduction of workplace levies for parking.	Medium Term
	Recruit local people into local jobs.	Medium Term
	Actions partners can take	
	Aim to purchase goods and services from local companies that support the Green/Circular Economy (see above).	Medium Term

Action Plan 2
The built environment

Objective	Actions Sandwell Council can take	Timescale
2.3 Energy devolution	Work with representatives and the Mayor of the Combined Authority to lobby for local influence over funding for energy projects (ECO funding etc).	Short Term
	Introduce the concept of heat networks and other local-based energy generation to both residents and businesses.	Medium Term
	Work with developers and businesses to understand the barriers preventing investment in Sandwell. Particularly the impact of new electrical connections and grid capacity.	Medium Term
	Consider potential location of Energy Innovation Zones (EIZ's).	Medium Term
	Actions residents can take	
	Be receptive to new ideas and technology, including new ways of receiving/purchasing heat and power.	Medium Term
	Actions businesses can take	
	Work with the Council to help us understand the problems faced by local businesses, particularly around the cost of energy and its impact on competitivity.	Medium Term
	Actions partners can take	
	Work with the Council to help us understand the problems faced by local businesses, particularly around the cost of energy and its impact on competitivity.	Medium Term

Action Plan 3
Transport

Action Plan 3
Transport

Introduction

Government figures show that carbon dioxide (CO_2) emissions in the borough reduced by 32 percent between 2005 and 2017. The most significant reduction has been for the industrial sector, where emissions fell by almost 50 percent over the period.

Emissions from domestic activities reduced by around 34 percent, with transport achieving just a 5 percent reduction. With transport related CO_2 emissions amounting to 38% of Sandwell's total CO_2 emissions, along with the associated emissions of particulates and nitrogen dioxide, a robust action plan is needed.

The scope to reduce transport emissions is however significant and can be achieved primarily through reducing the need to travel, changing the way people make their journeys and making motorised travel more energy efficient. Such a reduction would also enable significant improvements in air quality to be realised.

Being positioned between Wolverhampton, Walsall, Dudley and Birmingham, Sandwell is served by a dense transport network incorporating roads, railways and canals which are well connected regionally and nationally.

Sandwell's associated densely populated area, high concentration of local commercial activity and proximity to Birmingham city centre has resulted in high levels of transport demand within Sandwell, both between its neighbours and for traffic traveling through the borough. Reductions and changes in travel demand therefore need to happen in relation to organisations and places outside Sandwell.

Support for decarbonising transport and changing travel behaviour is available through the planning and transportation policies stated in the Black Country Core Strategy (to be replaced by Black Country Plan when adopted in 2024) and other documents contained in Sandwell's Local Plan, along with the regional and sub-regional transport measures and facilities developed by the WMCA and Black Country authorities respectively.

The wide range of actions required to address transport decarbonisation, as outlined below, will need to be implement by Sandwell Council and Sandwell's residents, business and other organisations.

Action Plan 3
Transport

Action Plan Themes

1. Promotion of sustainable travel

Sustainable travel should be promoted using a public-facing campaign that regularly provides information about how places can be accessed by cycling, walking, public transport and car sharing. Incentives to use such methods of transport, particularly those that involve physical activity, should be promoted and provided through the various digital and social media platforms that the council and other agencies use to disseminate information about its activities.

The most difficult challenge in relation to bringing about a reduction of transport related CO_2 emissions and other pollutants involves travel behaviour change. Set against a background of car travel being cheap, relative and convenient, promotion of sustainable travel will need to relate to making other journeys more attractive especially leisure and shopping.

Commuting can be changed by home working, but manufacturing jobs need to be physically accessed, therefore accessibility needed.

2. Develop a low carbon transport system

The council needs to work towards a low carbon transport system that supports Sandwell's economy and delivers multiple benefits, such as reduced carbon emissions, improved air quality, reduced congestion, improved health and road safety.

Electric vehicle charging, cleaner public transport, last-mile travel and freight solutions, walking and cycling networks and road-space reallocation are examples of what such a system needs to include.

The shared transport agenda will also need to be developed, with assistance from the WMCA and other partners, such that current public transport modes are supported by bicycle hire and car club vehicles.

This will also help to develop Mobility as a Service (MaaS) platforms to be developed which further reduce the need for private car ownership.

Action Plan 3
Transport

Action Plan Themes

3. Reduce Sandwell Council's transport emissions

Transport emissions from the services that the council commissions and delivers can be reduced by various means, including reduced emissions from its transport fleet and through the development of a travel plan.

4. Planning policies to support sustainable transport choices

Planning policies that encourage developers to promote sustainable transport choices and reduce car dependency need to be established.

The Black Country Core Strategy (to be renamed as the Black Country Plan when adopted in 2024) includes policies to support this need, although further assistance from central government will also be needed. Mitigating and adapting to climate change and promoting sustainable development are key principles which underpin the vision for transforming the Black Country environmentally, socially and economically.

The role of transport and the location and design of new development are important factors that need to be considered in order to achieve sustainable development. Place-making that both supports physical activity and reduces car dependency should be prioritised.

Planning policies to support sustainable transport and travel can also assist with building an inclusive economy in Sandwell through reducing congestion and improving access to employment for local people.

Progress to Date

Transport-related CO_2 emissions have reduced by 5% between 2005 and 2017, although against a background of increased vehicle engine efficiency over this time period, the opportunity to significantly reduce CO_2 has been lost due to vehicles becoming larger, increased travel distances for commuting and leisure, low take-up of sustainable travel modes for short journeys and developments that have increased car dependency.

The ability to reverse these trends is becoming increasingly difficult to realise as people become locked into patterns of travel behaviour that they do not see themselves being detached from.

There has a least been an increased appreciation by people that particulate matter and nitrogen dioxide (NO_2) air pollution, which in urban areas is caused primarily by motor traffic, needs to be reduced and that car travel will not be able to satisfy the travel needs of a significant proportion of the population.

Along with renewed interest in and concern about climate change, the need to reduce transport-related CO_2 is being addressed more seriously by all sectors of society.

Action Plan 3
Transport

Objective	Actions Sandwell Council can take	Timescale
3.1 Promotion of sustainable travel	Continuous borough-wide promotion through various media channels, events and an annual climate change festival about travel awareness and the advantages of public transport, car sharing, walking and cycling.	On-going
	Engage with employers to help them to adopt travel plans that promote and facilitate sustainable employee travel.	On-going
	Work with schools to promote walking and cycling, including effective engagement with parents and carers to create awareness about the health benefits of reducing car dependency.	On-going
	Promote the use of digital platforms for incentivising sustainable travel, consultation and journey planning, particularly to increase the use of walking, cycling and public transport networks.	On-going
	Actions residents can take	
	Make more local leisure, education, commuting, healthcare and shopping journeys by walking, cycling and public transport and, where and when possible, commit to working from home on a regular basis.	On-going
	Actions businesses can take	
	All workplaces to register with the Modeshift STARS Business platform to create nationally accredited travel plans.	Medium Term
	Change terms and conditions, working practices and parking management to increase the use of sustainable travel.	Short Term
	Actions partners can take	
	Travel services, ticketing and information for commuter, leisure and young persons' travel developed by the WMCA (working with transport operators) to enable flexibility at low cost, plus the development of travel demand initiatives.	Short Term
	Public-facing services (eg schools, museums, visitor attractions, parks and libraries) to be involved in public awareness campaigns on transport, highlighting the financial and health benefits of sustainable travel.	Short Term

Action Plan 3
Transport

Objective	Actions Sandwell Council can take	Timescale
3.2 Develop a low carbon transport system	Implement highway measures and transport facilities that fully accommodate and promote the use of public transport, cycling and walking, making journeys by such methods easier, faster and safer, alongside measures to discourage car use.	Short Term
	Increase the use of lower carbon vehicles through policies and pricing, and support the development of suitable infrastructure, in particular for electric vehicles in car parks and for car users without off-street residential car parking.	Short Term
	Introduce facilities at developments through the planning system to increase use of shared and cleaner transport modes.	Short Term
	Engage with the WMCA and Black Country authorities to review and continually improve the statutory Movement for Growth Local Transport Plan to address accessibility, transport inequality, congestion, modal shift and energy use.	On-going
	Implement and enforce road closures near schools at start/finish times and develop safer routes to school.	Short Term
	Increased bus lane enforcement along with other traffic management measures which improve bus reliability and speeds.	Short Term
	Implement weekly road closures for car free days in town centres and local centres to encourage local people to use shops and services closer to where they live.	Short Term
	Carry out a consultation and audit of the travel and transport needs of residents, businesses, healthcare facilities, education sites, leisure and retail facilities to inform a transport strategy for the borough.	Short Term
	Use the air pollution model, which will be developed for Sandwell to identify additional air quality hot spots, to influence the management of traffic flows through Sandwell.	Medium Term

Action Plan 3
Transport

Objective	Actions residents can take	Timescale
3.2 Develop a low carbon transport system	Replace petrol and diesel vehicles with a combination of bicycles, travel cards, Mobility as a Service (MaaS) platforms, car club vehicles and low emission vehicles.	Short Term
	Participation in Sandwell's Local Access Forum and Cycling Forum to ensure that walking and cycling networks meet the needs of people and attract continued funding for their development.	On-going
	Actions businesses can take	
	Review/audit workplaces to improve access by walking, cycling, public transport and electric vehicles.	Short Term
	Local bicycle shops to offer discounted bicycles and maintenance to employees from workplaces and schools registered with the council's Modeshift STARS Business and Education platforms.	Short Term
	Employers to offer services and products to assist residents and other employers with low carbon travel.	Short Term
	Freight companies to develop low carbon systems that use electric vans/lorries and cargo e-bikes for last-mile delivery.	Short Term
	Public transport operators to purchase electric and/or hydrogen powered buses.	Short Term

Action Plan 3
Transport

Objective	Actions partners can take	Timescale
3.2 Develop a low carbon transport system	WMCA, Black Country LEP, Government, Highways England, Network Rail and other agencies to assess and fund transport schemes on the basis of their ability to reduce carbon emissions and reduce car dependency.	On-going
	WMCA to develop strategies for public transport use and help to implement lower emission buses and trains, along with a bicycle hire scheme, support for the development of Mobility as a Service platforms and demand responsive transport.	On-going
	Government to fund both the West Midlands and Sandwell Local Cycling and Walking Infrastructure Plans (LCWIP).	Short Term
	Canal and River Trust to work with the council and developers to increase the number of step-free access points on Sandwell's canal network, along with upgrading to all-weather towpaths.	Medium Term
	Electricity infrastructure to be capable of supporting a significant increase in the use of electric vehicles, including automotive research and development into battery technologies and ultra low emission vehicles.	Short Term
	Taxi owners/companies to purchase low emission vehicles at times of renewal.	On-going

Action Plan 3
Transport

Objective	Actions Sandwell Council can take	Timescale
3.3 Establish planning policies that encourage developers to promote sustainable transport choices.	Develop planning policies which encourage developers to reduce car dependency.	Long Term
	Reduce the number of car parking spaces required at residencies in new housing developments.	Short Term
	Planning conditions and obligations and the community infrastructure levy to promote and facilitate sustainable travel.	On-going
	Develop and raise the profile of the council's Sustainable Modes of Travel Strategy (SMOTS) for schools in Sandwell.	On-going
	Actions residents can take	
	Residents, employers and representatives of other agencies to engage in policy development and participate in panels to discuss their travel and transport needs to form the On-going review of a transport strategy for the borough.	Medium Term
	Actions businesses can take	
	Employers to regularly engage with the council through representative bodies to discuss travel and transport issues.	On-going
	Actions partners can take	
	WMCA/other agencies to collect data/information to research changes in travel patterns/needs and how these can be influenced by planning/transportation strategies/policies to support sustainable travel choices.	On-going

Action Plan 4

Waste and Recycling

Action Plan 4
Waste and recycling

Background

Recycling has the ability to minimise the rate of global climate change by reducing the extraction of raw materials from the earth and the amount of fossil fuel burnt in the manufacturing process. Waste prevention is even more effective — like recycling, it diminishes the need for raw materials, saves energy and fossil fuels, and diverts materials away from landfills and incinerators.

Climate change is a public health crisis and to remedy this problem, we need to make a global move toward a circular economy — wherein we use resources for as long as possible, get the maximum value from them while in use, and then reclaim and regenerate resources at the end of their service life.

The European Union, as well as the UK and Japan, have each already implemented a circular economy at some level, and have seen positive results. If the rest of the world were to follow suit, it could reduce the demand for energy, raw materials and fossil fuels, and, consequently, the volume of greenhouse gases being released into the atmosphere would be greatly diminished.

The UK recycling rate for waste from households was 45.0% in 2018, decreasing from 45.5% in 2017. The UK Government has a target to recycle at least 65% household waste by 2035 and a target of zero food waste to landfill by 2030. The recycling rate in Sandwell for 2018 to 2019 was 35.8%.

In 2018, total 'waste from households' decreased to 22.0 million tonnes, a 1.8 per cent decline from 2017, in which it was 22.4 million tonnes. This is equivalent to 394 kg per person, down from 403 kg per person in 2017, a decrease of 2.2 per cent. The kg per person rate in Sandwell for 2018 was 593kg.

The need to reduce food waste has been acknowledged for many years. In the UK alone, an estimated 10 million tonnes of food and drink are wasted post-farm gate annually, worth around £20 billion. Excess food waste costs us money and is environmentally damaging. Growing excess food that no one eats damages the Earth's ecosystems when we dispose of it. Moreover, a fifth of UK greenhousegas (GHG) emissions are associated with food and drink, mostly created during production (agriculture and manufacturing) – and needlessly if the food and drink are wasted.

Action Plan 4
Waste and recycling

New Resources and Waste Strategy

At the time of writing, the government is consulting on a Resources and Waste Strategy which will have significant impacts on the way we recover and recycle waste. The Strategy sets out how it will preserve our stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy.

At the same time it will minimise the damage caused to our natural environment by reducing and managing waste safely and carefully, and by tackling waste crime. It combines actions it will take now with firm commitments for the coming years and gives a clear longer-term policy direction in line with the Government's 25 Year Environment Plan.

It will strive to eliminate avoidable plastic waste over the lifetime of their 25 Year Plan, doubling resource productivity, and eliminating avoidable waste of all kinds by 2050.

In the 25 Year Environment Plan, the Government pledged to leave the environment in a better condition for the next generation. Their Strategy sets out how to meet that commitment and will be supported by a series of consultations on known problem areas, such as packaging waste.

They want to prolong the lives of the materials and goods that are used, and move society away from the inefficient 'linear' economic model of 'take, make, use, throw'. A more circular economy will keep resources in use as long as possible, and extract maximum value from them.

Actions we should all be taking now

Reduce

We should all avoid products with excessive packaging - the production of the packaging uses additional energy. The extra volume and weight will have to be transported (by lorries, aircraft, ships etc.). The packaging will be thrown out and will need to be collected from people's home by large waste disposal vehicles.

Re-use

Everyone should try and re-use products for as long as feasibly possible. Gifting items to charity is also an excellent form of recycling. Charities not only sell old clothes, but would also appreciate other house hold items, such as books, music CDs, videos, etc. As well as saving the planet against global warming people can also help others.

Recycle

Recycling uses less energy and produces less pollution than making things from scratch.
For example:-
making aluminium cans from old ones uses one twelfth of the energy to make them from raw materials.

For glass bottles, 315kg of CO_2 is saved per tonne of glass recycled after taking into account the transportation and processing. Making bags from recycled polythene takes one third the Sulphur Dioxide and half the Nitrous Oxide, than making them from scratch.

Composting

Another form of recycling is composting household and garden waste. A garden composter helps fertilize soil, making plants and vegetables grow better. Using home made compost will minimise depletion of peat bogs, reduces the number of refuse collections needed, and reduces the strain on waste disposal sites.

Action Plan 4
Waste and recycling

Objective	Actions Sandwell Council can take	Timescale
4.1 Reduce the volume of waste generated in the Borough, through the use of technological and behavioural changes	Engage the public, communities and businesses through boroughwide behavioural change initiatives to provide a greater understanding of waste issues and best practices to reduce the volume of waste they produce borough-wide.	Medium Term
	Promote initiatives and campaigns to reduce waste across the borough, alongside introducing water fountains across the borough to reduce single use plastic waste.	Medium Term
	Investigate ways to eliminate the remaining 7% of waste going to landfill and implement into council policy.	Long Term
	Explore developing repair and reuse facilities, workshops and skill sharing across the borough.	Medium Term
	Explore how the council can become single-use plastic 'free' by 2025.	2025
	Explore the opportunities of an initiative with social enterprises to tap into the funding to help change behaviours and/or delivering fuel from waste.	Medium Term

Action Plan 4
Waste and recycling

Objective	Actions residents can take	Timescale
4.1 Reduce the volume of waste generated in the Borough, through the use of technological and behavioural changes	Take responsibility for the waste they create and actively try to re-use or recycle.	Short Term
	Actions businesses can take	
	Take the lead in reducing consumption and waste.	Medium Term
	Actions partners can take	**Timescale**
	Broader communications across the Combined Authority on the positives of reducing or re-using waste.	Short Term

Action Plan 4
Waste and recycling

Objective	Actions Sandwell Council can take	Timescale
4.2 Maximise recycling and food waste collections across the Borough through the use of behavioural changes.	Engage the public, communities and businesses through borough-wide behavioural change initiatives.	Medium Term
	Engage the public, communities and businesses on changes to collection frequencies for refuse and recycling.	Medium Term
	To meet the Government's recycling target of 65% by 2035.	2035
	Promote initiatives and campaigns to maximise collection rates of recycling and food from domestic and commercial properties across the borough.	Short Term
	Explore the opportunities of food waste collections from commercial properties.	Medium Term
	Explore what partners are available in the Borough to create a Sustainable Food Network.	Medium Term
	Explore the impact of deposit and return schemes to recycling rates and litter across the borough.	Short Term

Action Plan 4
Waste and recycling

Objective	Actions residents can take	Timescale
4.2 Maximise recycling and food waste collections across the Borough through the use of behavioural changes.	Purchase only the food they need from local companies that support the Circular Economy.	Short Term
	Take responsibility for the waste they create and avoid single-use containers. When that isn't possible, try to buy food packaged in paper, cardboard or glass.	Short Term
	Buy lightly used products rather than new and donate anything no longer needed that is still working.	Short Term
	Make, grow and compost as much food as possible at home.	Short Term
	Carry reusable water bottles, takeout containers and straws.	Short Term
	Actions businesses can take	
	Consider the types of packaging they use and the way these can be re-used or recycled.	Medium Term
	Actions partners can take	
	Broader communications across the Combined Authority on the positives of re-use/recycling.	Short Term

Action Plan 4
Waste and recycling

Objective	Actions Sandwell Council can take	Timescale
4.3 Improve waste management and ownership through the implementation of effective regulations and policy.	Keep up to date with national policies on waste and seek to contribute and influence new waste regulations.	On-going
	Review and develop the Council's waste strategy in line with Government policy and regulations.	On-going
	Actions residents can take	
	Participate in any consultations needed to improve waste collections.	On-going
	Actions businesses can take	
	Keep up to date with national policies on waste and seek to contribute and influence new waste regulations.	On-going
	Actions partners can take	
	Government can help by providing financial support to the establishment of new waste system infrastructure and initiatives and provide clarity on future upstream and downstream waste arrangements to tackle waste issues systemically.	On-going

Action Plan 5

Adaptation and resilience

Action Plan 5
Adaptation and resilience

Introduction

This chapter details how Sandwell can become more resilient to the impacts of climate change via adaptive actions in priority areas. The UK Climate Impacts Programme predict that Sandwell will have hotter drier summers and warmer wetter winters. Therefore we need to take action such as planting more urban trees to cool the Borough during heatwaves and to help reduce flooding; ensuring adaptation is considered at all levels of decision making; embedding adaptation within planning policy; and ensuring impact assessments are undertaken to maximise any opportunities and mitigate any risks,; and ensuring that service areas have plans in place to enable them to continue delivering during disruption.

Stern Review (2006)[12] made a clear case for investing in adaptation - if we invest 2% of our annual Gross Domestic Product (GDP) now, it will prevent global GDP being up to 20% lower than it otherwise might be. Therefore, investing in climate change mitigation and adaptation is a pro-growth strategy for the long-term future of Sandwell.

The UKCIP 2005 report Measuring Progress[13] highlights the risks and opportunities of climate change in the West Midlands.

Key Opportunities

- Reduced problems for livestock freezing in winter
- Greater opportunities for forestry
- Wetter winters benefit biodiversity in wetland areas
- Less fuel poverty
- Reduced damage to infrastructure from freezing weather and ice
- Reduced need for railway point heaters in winter
- More walking and cycling for work and leisure

Key Challenges

- Land use limited by higher flood risk
- Urban drainage systems, may not be able to accommodate intense precipitation
- Increased flood risk on major rivers
- Power stations constrained by water availability
- Intense rainfall and storm damage to buildings
- Increased rail safety and maintenance requirements

The three main actions in this section are:

1. To enhance our green spaces, planting strategically, based on evidence around the need for cooling, exposure to flooding, and to achieve maximum carbon sequestration.

2. The people, places, infrastructure and organisations in Sandwell need to boost their resilience to 'locked in' climate breakdown. Significant changes are inevitable as they have already happened or are already guaranteed to happen. This will require investment and for SMBC to think differently about nature-based solutions to climate change, as well as how we build our communities.

3. To ensure a better-informed population that understand the impacts and implications of climate change.

There are many synergies with other chapters in this strategy as reducing demand for energy and resources will not only improve our resilience but also reduce the emissions that result in climate change.

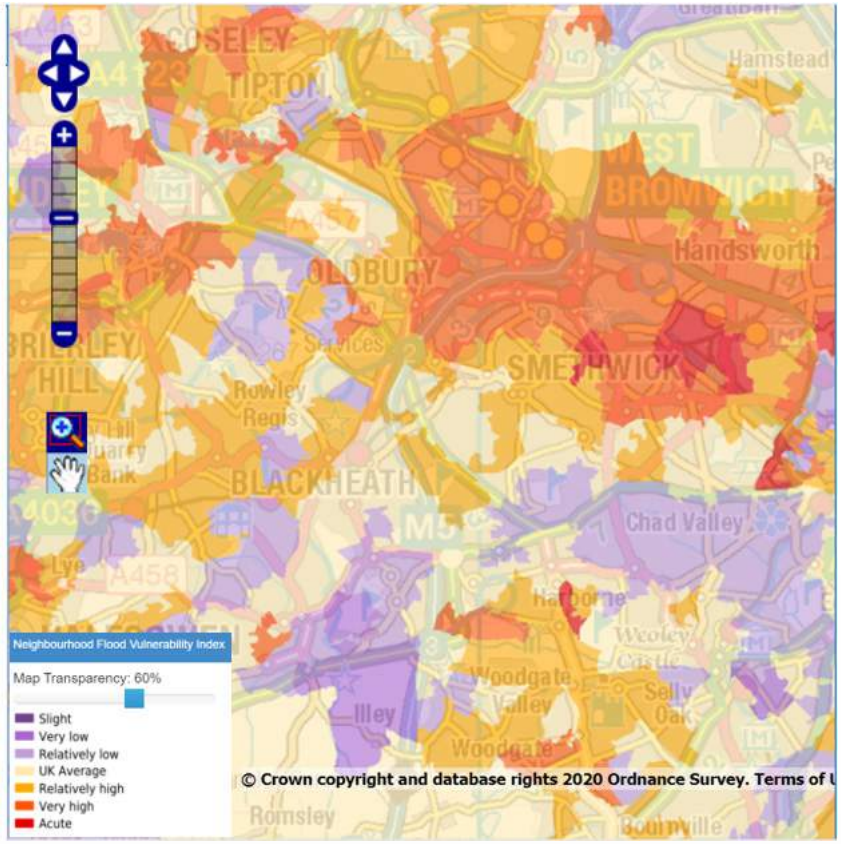
[13]http://www.lse.ac.uk/GranthamInstitute/publication/the-economics-of-climate-change-the-stern-review/

[12]https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

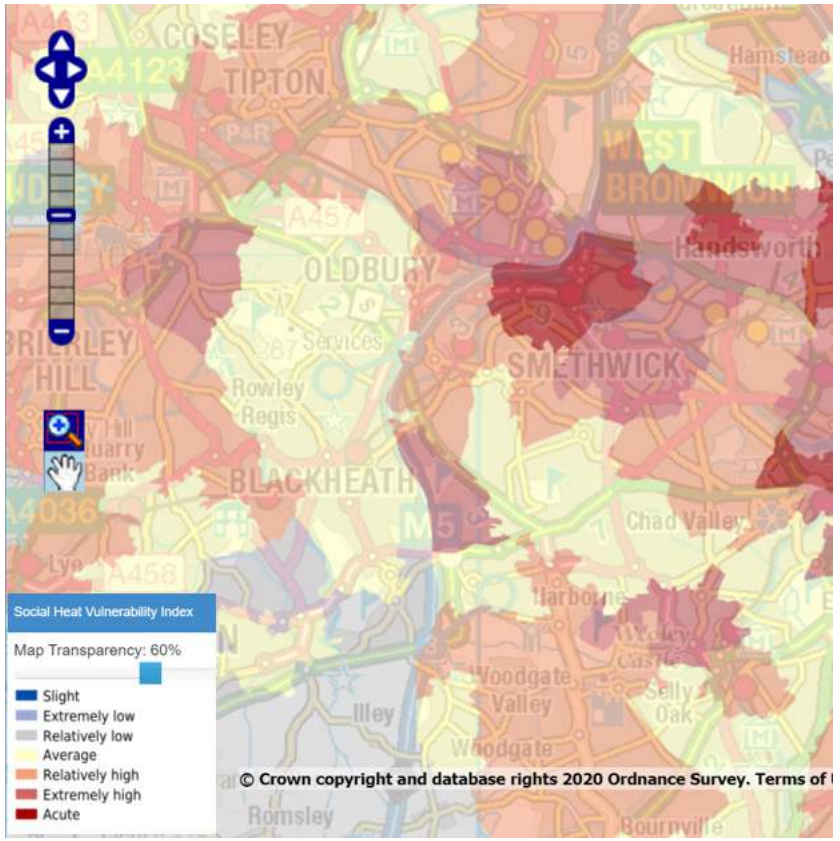
Action Plan 5
Adaptation and resilience

Mapping of Vulnerability in Sandwell using the Climate Just Mapping Tool (www.climatejust.org.uk/)

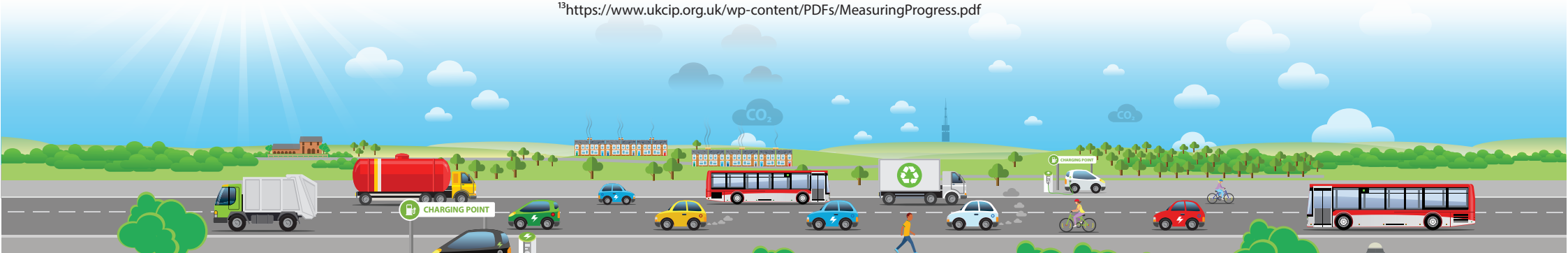
Flood Vulnerability



Heat Vulnerability



[13]https://www.ukcip.org.uk/wp-content/PDFs/MeasuringProgress.pdf



Action Plan 5
Adaptation and resilience

Aim: To protect and expand the Borough's trees and green and open spaces whilst maximising their flood risk, cooling, physical and mental health, biodiversity, air quality, noise and carbon sequestration benefits.

Objective	Actions Sandwell Council can take	Timescale
5.1 Develop a better understanding of the borough's tree stock and its role in carbon sequestration	Devise a method for calculating the extent of the borough's tree stock.	Medium Term
	Research methods for assessing trees in terms of their ability to sequestrate carbon.	Short Term
	Establish potential for a pilot scheme for planting road-side trees to help inform a future programme of borough-wide tree planting.	Medium Term
	Explore the potential for a tree 'planted for every resident target'.	Short Term
	Plant 15,000 trees across the borough.	Short Term
	Establish a replacement ratio for developers to minimise tree loss during new developments.	Medium Term
	Work with partners and private landowners in Sandwell to investigate opportunities for planting new woodlands.	Short Term
	Actions residents can take	
	Support council initiatives for localised recording of trees.	Medium Term
	Become involved in the planting of 15,000 new trees.	Short Term

Action Plan 5
Adaptation and resilience

Objective	Actions businesses can take	Timescale
5.1 Develop a better understanding of the borough's tree stock and its role in carbon sequestration	Support council initiatives for localised recording of trees.	Medium Term
	Become involved in the planting of 15,000 new trees.	Short Term
	Support initiatives for tree planting and establishing new woodlands.	Medium Term
	Actions partners can take	
	Offer advice and guidance on how to record and assess tree stock.	Medium Term
	Work with the Forestry Commission to ensure a more viable tree stock within the city, implementing a tree valuation procedure to ensure the most important trees are sufficiently regarded and protected, and by planting larger new trees with longer life spans.	Long Term
	Support initiatives for tree planting and establishing new woodlands.	Medium Term
	Work with Sandwell MBC and WMCA to identify land in the West Midlands to establish new woodlands.	Medium Term

Action Plan 5
Adaptation and resilience

Objective	Actions Sandwell Council can take	Timescale
5.2 To ensure risk contingency procedures are in place	Incorporate emergency measures into contingency plans to enable services to cope in the event of a water shortage, flood or drought.	On-going
	Ensure an effective heatwave response and recovery health plan is in working order.	On-going
	To develop a layered GIS mapping system to aid the identification of the Borough's most vulnerable people in relation to the effects of climate change.	On-going
	To evaluate whether current planning policy is aligned with adaptation objectives e.g. by restricting building projects in areas at risk of flooding.	On-going
	Actions residents can take	
	Identify local resources e.g. community halls, 4X4 vehicles that might be of use in an emergency.	Short term
	Participate in emergency exercises to test current plans and arrangements.	Short term
	Consider taking actions which can mitigate surface water flooding, including minimising use of water.	On-going
	Actions businesses can take	
	Update business continuity plans to ensure water (both excess and shortage) and heat (both cold snaps and overheating) are covered.	Short term
	Ensure measures are in place to prepare your workforce to climate impacts, people who work outside will be especially prone to temperature impact.	Short term
	Actions partners can take	
	Environment Agency and Forestry Commission to look into 'shade trees' to provide shelter and screening from sun.	Short term
	Local Resilience Forum to feed into organisations heatwave plans and the Department of Health and Social Care to send out heatwave warnings.	On-going

Action Plan 5
Adaptation and resilience

Objective	Actions Sandwell Council can take	Timescale
5.3 To ensure the Borough is well informed about climate change issues and options	Engage with schools and communities about the impacts of climate change.	Short term
	Ensure an effective heatwave response and recovery health plan is in working order.	Short term
	Actions residents can take	
	Work with the Council to ensure your communities are engaged and empowered with the knowledge of climate change impacts and adaptation through appropriate forums and other communications materials.	Short term
	Actions businesses can take	
	Work with the Council through a partnership and other communications materials to ensure your business is engaged and empowered with knowledge of climate change impacts and adaptation.	Short term
	Ensure your workforce is well-informed of climate change issues.	Short term
	Actions partners can take	
	Work with Sandwell College to ensure all students receive a course in climate change.	Short term
	Work with primary and secondary schools in Sandwell to embed climate change into their curriculum.	Short term

Action Plan 6

Natural Capital

Action Plan 6
Natural Capital

Natural Capital refers to any part of the natural world which benefits people. It can provide and underpin a range of services (often referred to as ecosystem services) to people including economic, social, environmental, cultural and spiritual[15].

Through taking a Natural Capital approach, it is possible to highlight the various ways that nature provides a foundation for human health, wealth, identity and happiness. Sandwell's Natural Capital includes its nature reserves, parks, trees, streams, rivers, ponds, lakes, meadows, woodlands, allotments, playing fields.

Sandwell contains significant amounts of natural and semi-natural space with almost a quarter of all land (23.7%) being some form of green space. There are 1200 hectares of accessible green space spread across 323 sites.

The largest area of natural green space is Sandwell Valley Country Park, which contains several designated wildlife sites, including three Local Nature Reserves. A further six Local Nature Reserves, and multiple other wildlife sites are spread across the borough.

Currently Sandwell has 3.63 hectares of green space per 1000 population which has fallen from 4.24 in 2006. This fall is largely due to population increase and by 2030 the ratio of green space is predicted to fall further to 3.3 hectares per 1000 population. Sandwell's Green Space Strategy 2020 – 2030 provides further analysis of the uneven distribution of green space across the borough and recommends that measures are taken to address this in geographical areas which are particularly poorly served with green space.

As an urban and densely populated borough with almost no access to surrounding countryside, Sandwell is impacted by the 'urban heat island effect', which is when average temperatures are higher than nearby rural or suburban areas, due to the amount of the sun's heat which is absorbed by man-made materials, such as tarmac and concrete.

**Forge Mill Lake,
Sandwell Valley Country Park**

[15] https://naturalcapitalcoalition.org/natural-capital-2/

Action Plan 6
Natural Capital

Since the mid-1940s and following the intensification of farming, wildlife in Britain's countryside has suffered from a loss of habitats and has seen significant declines in many species of both plants and animals. We depend upon the countryside for much of our food, most of which would not grow without being pollinated by insects.

Although Sandwell is an urban borough, it still has an important role to play in providing habitats for wildlife and in particular insects, which in turn pollinate the food grown within and outside of Sandwell. This document includes measures which could result in more food being grown in Sandwell, something that will largely only be possible if suitable habitats are provided for pollinators such as solitary bees.

Increasingly the natural world is being understood as an essential ingredient in ensuring our well-being and continued survival on earth. Natural Capital plays a vital role in reducing the impacts of climate change, e.g. surface water flooding and extreme heat, but it also absorbs carbon.

In this sense, Sandwell's Natural Capital is a key component in the plan to reduce the borough's emissions.

The range of benefits to Sandwell from green spaces also include: the positive impact upon property prices; an improved image as a place to invest; cleaner air; improved mental and physical well-being and a home for wildlife.

For a long time, economic models have paid little attention to Natural Capital, despite being entirely dependent upon it, e.g. in the provision of raw materials upon which so much production is dependent. The journey to becoming carbon neutral by 2041 must have natural capital at its core and recognise its role in our lives, as well as providing many of the solutions posed by climate change.

Roadside Verge A41 West Bromwich

Action Plan 6
Natural Capital

Objective	Actions Sandwell Council can take	Timescale
6.1 Create an integrated approach to the management of green spaces to allow the mitigation and adaptation benefits to be realised.	Support the Greenspace Strategy Delivery Board.	Short Term
	Support the development of an investment strategy for green spaces.	Short Term
	Create a Natural Capital Working Group.	Short Term
	Identify opportunities for creating wildlife-friendly corridors.	Short Term
	Undertake a pilot study to consider the practicality of removing areas of 'hard landscaping' and replacing them with vegetation.	Medium Term
	Investigate and cost opportunities to increase the amount of strategically placed green spaces, trees and water bodies within the city to reduce the risk of pluvial/ fluvial flash flooding from intense/ prolonged periods of precipitation.	Medium Term
	Work with residents to use offsetting practices (e.g. tree planting) as an educational opportunity about the issues we face and the available solutions.	Medium Term
	Ensure all departments involved in land management are represented on the Natural Capital Working Group.	Short Term

Action Plan 6
Natural Capital

Objective	Actions residents can take	Timescale
6.1 Create an integrated approach to the management of green spaces to allow the mitigation and adaptation benefits to be realised.	Join existing or create new volunteer groups to support work on local green spaces.	Short Term
	Leave part of your garden wild, make habitats for wildlife and plant trees to absorb carbon dioxide.	Short Term
	Actions businesses can take	
	Investigate options for local businesses to off-set their emissions by investing in natural capital.	Long Term
	Actions partners can take	
	Offer advice and guidance on achieving mitigation and adaptation benefits.	Short Term
	Work with the Environment Agency to conduct green infrastructure surveys of the Borough to gain better baseline data. When mapped, this data could identify losses of connectivity and areas for priority action.	Medium Term

Action Plan 6
Natural Capital

Objective	Actions Sandwell Council can take	Timescale
6.2 Understand the potential measures (and their costs) which would increase the biodiversity and climate change value of green spaces and roadside verges.	Identify and categorise green spaces, e.g. type of habitat.	Short term
	Produce outline plan for site improvements.	Medium term
	Produce indicative costs for above improvements.	Medium term
	Actions residents can take	
	Join existing or create new volunteer groups to support work on local green spaces.	Short term
	Actions businesses can take	
	Offer resources or in-kind support for enhancing local green spaces.	Long term
	Actions partners can take	
	Offer advice and guidance on enhancement measures for green spaces.	Short term

Action Plan 6
Natural Capital

Objective	Actions Sandwell Council can take	Timescale
6.3 Enhance the role of Planning in embedding a requirement for Natural Capital in future development.	Establish existing 'workable' regulations used by other councils regarding the role of natural capital in new developments.	Long Term
	Ensure new regulations account for any tree loss by including a replacement ratio or a requirement for equivalent local investment in natural capital.	Long Term
	Investigate and cost opportunities to use increased amounts of green infrastructure, such as rainwater harvesting, as part of council building projects.	
	Actions businesses can take	
	Comply fully with any new regulations relating to Natural Capital.	Long Term
	Aim to enhance existing premises with elements of Natural Capital.	Long Term
	Actions partners can take	
	Offer advice and guidance on adopting and implementing new policies around natural capital.	Short Term

Glossary

CO2
Carbon dioxide

GHG
Greenhouse Gas

SCATTER
Setting City Area Targets and Trajectories for Emissions Reduction

SMBC
Sandwell Metropolitan Borough Council

UKCCC
UK Committee on Climate Change

VCSE
Voluntary, Community and Social Enterprise

WMCA
West Midlands Combined Authority

Appendix 1: High Ambition pathway actions recommended by SCATTER for Sandwell

Agriculture and land use	Forestry	24% increase in forest cover by 2030.
	Land Management	7% decrease in grassland. Cropland decreases 1%; increase in the coverage of settled land.
	Livestock Management	0.5% annual reduction in livestock numbers.
	Tree planting	Tree-planting to increase current coverage by 30% by 2030; from 2030-2050 further increase of 20%.
Domestic energy	Lighting, appliances, and cooking - Demand	By 2050, domestic lighting and appliance total energy demand has dropped to 27% of current levels.
	Lighting, appliances, and cooking - Electrification	Small reductions in efficiency of domestic cooking. Proportion of cooking which is electric increases to 100% in 2050.
	Space heating and hot water - Demand	Hot water demand per household reduces by 8% every 5 years.
	Space heating and hot water - New build	From 2021, 100% new-build properties are built to passivhaus standard.
	Space heating and hot water - Retrofit	By 2050, 10% of current stock is retrofitted to a medium level; 80% deep retrofit.
	Space heating and hot water - Technology	By 2050, 7% resistive heating; 60% air-source heat pumps and 30% ground-source heat pumps; 3% district heating.

Appendix 1: High Ambition pathway actions recommended by SCATTER for Sandwell *(continued)*

Energy generation	Biomass/Coal power stations	Solid biomass generation quadruples in 2025, dropping off after that. ; Coal phase-out follows trajectories from the National Grid's Two Degrees scenario.
	Hydroelectric power stations	Hydroelectric power generation grows to 34 MWh per hectare inland water in 2030; 41 in 2050.
	Offshore wind	Large-scale onshore wind generation grows to 4.8 MWh per hectare in 2030; 6.9 MWh in 2050.
	Onshore wind	Large-scale onshore wind generation grows to 1.9 MWh per hectare in 2030; 2.2 MWh in 2050.
	Small-scale wind	Small-scale wind grows to 2.8 MWh per hectare in 2030; 3.3 in 2050 (from a baseline of 1.2 MWh per hectare.).
	Solar PV - Large	Large-scale solar generation grows to 200 kWh per hectare in 2030; 400 in 2050 (from a baseline of 50 kWh per hectare.).
	Solar PV - Small	Local solar capacity grows, generating equivalent to 2500 kWh per household in 2030; 5200 in 2050 (from a baseline of 400 kWh per household.).
	Tidal and Wave	For areas with wave / tidal power, 320-fold increase by 2030, 1300-fold increase by 2050.

Appendix 1: High Ambition pathway actions recommended by SCATTER for Sandwell *(continued)*

Commercial processes	Heating and cooling - Demand	In 2050, commercial heating, cooling and hot water demand is 60% of today's levels.
	Heating and cooling - Technology	By 2050, 7% resistive heating; 60% air-source heat pumps and 30% ground-source heat pumps; 3% district heating.
	Lighting, appliances, and catering - Demand	Commercial lighting & appliance energy demand decreases 25% by 2050.
	Lighting, appliances, and catering - Electrification	By 2050, 100% of commercial cooking is electrified.
Industrial processes	Efficiency	Industrial electricity consumption is 50% of total energy consumption by 2035; 65% by 2050. Output falls by 2% every year for non-heavy industry.
	Output	Reductions in process emissions from all industry: general industry reduces process emissions at a rate of 4.5% per year. Chemicals emissions reduce 1% per year; metals 0.7% per year, and minerals 0.8% per year.

Appendix 1: High Ambition pathway actions recommended by SCATTER for Sandwell *(continued)*

Domestic transport	Domestic freight	By 2050, 22% decrease in distance travelled by road freight; 75% increase in efficiency. In waterborne transportation, 28% increase in use of waterborne transport.
	Domestic passenger transport - Demand	25% reduction in total distance travelled per individual per year by 2030.
	Domestic passenger transport - Modal shift	Average modal share of cars, vans and motorbikes decreases from current national average 74% total miles to 38% in 2050.
	Domestic passenger transport - Technology	Cars and buses are 100% electric by 2035, rail is 100% electric by 2030. Average occupancies increase to 18 people per bus km (from 12), 1.65 people per car-km (up from 1.56), and 0.42 people per rail-km (from 0.32).
International transport	International aviation	Department for Transport "Low" forecast for aviation. The "Low" forecast encapsulates 'lower economic growth worldwide with restricted trade, coupled with higher oil prices and failure to agree a global carbon emissions trading scheme. For reference see Pathways Methodology.
	International shipping	By 2050, 28% decrease in fuel use at UK ports.
Volume of Waste & Recycling	Recycling	65% recycling, 10% landfill, 25% incineration achieved by 2035, recycling rates increasing to 85% by 2050.
	Waste Reduction	Total volume of waste is 61% of 2017 levels by 2040.

Appendix 2:

The table below presents the ambitions of Sandwell Vision 2030 and how this strategy can be aligned with them.

VISION 2030 SANDWELL

Ambition 1

Sandwell is a community where our families have high aspirations and where we pride ourselves on equality of opportunity and on our adaptability and resilience.

1

Ambition 2

Sandwell is a place where we live healthy lives and live them for longer, and where those of us who are vulnerable feel respected and cared for.

2

Ambition 3

Our workforce and young people are skilled and talented, geared up to respond to changing business needs and to win rewarding jobs in a growing economy

3

Ambition 4

Our children benefit from the best start in life and a high quality education throughout their school careers with outstanding support from their teachers and families.

4

Ambition 5

Our communities are built on mutual respect and taking care of each other, supported by all the agencies that ensure we feel safe and protected in our homes and local neighbourhoods.

5

Ambition 6

We have excellent and affordable public transport that connects us to all local centres and to jobs in Birmingham, Wolverhampton, the airport and the wider West Midlands.

6

Ambition 7

We now have many new homes to meet a full range of housing needs in attractive neighbourhoods and close to key transport routes.

7

Ambition 8

Our distinctive towns and neighbourhoods are successful centres of community life, leisure and entertainment where people increasingly choose to bring up their families.

8

Ambition 9

Sandwell has become a location of choice for industries of the future where the local economy and high peforming companies continue to grow.

9

Ambition 10

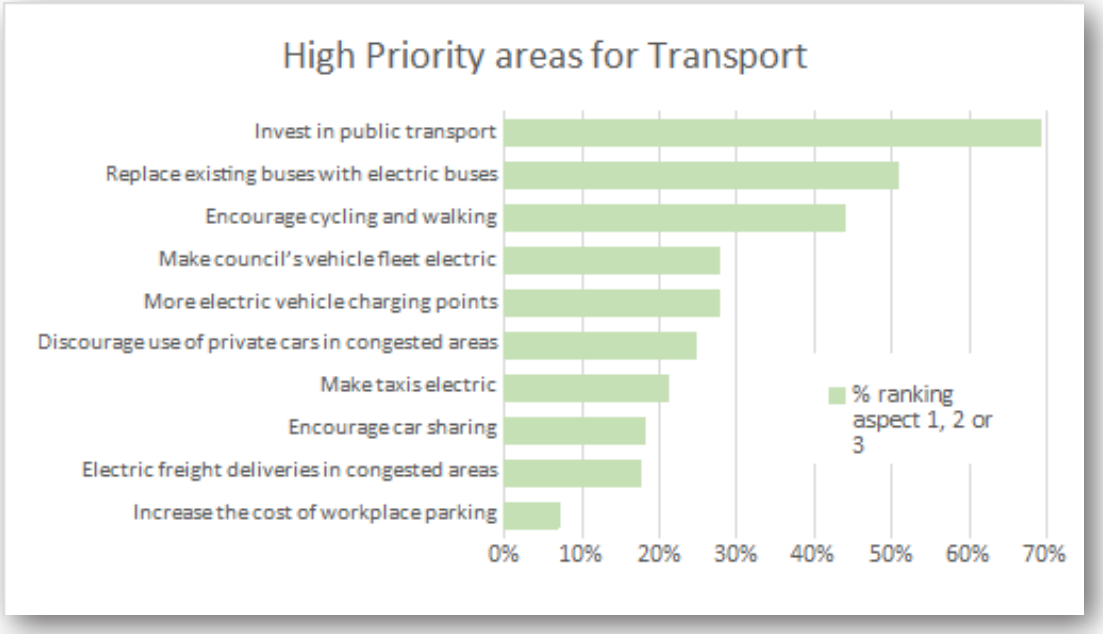
Sandwell now has a national reputation for getting things done, where all local partners are focused on what really matters in people's lives and communities.

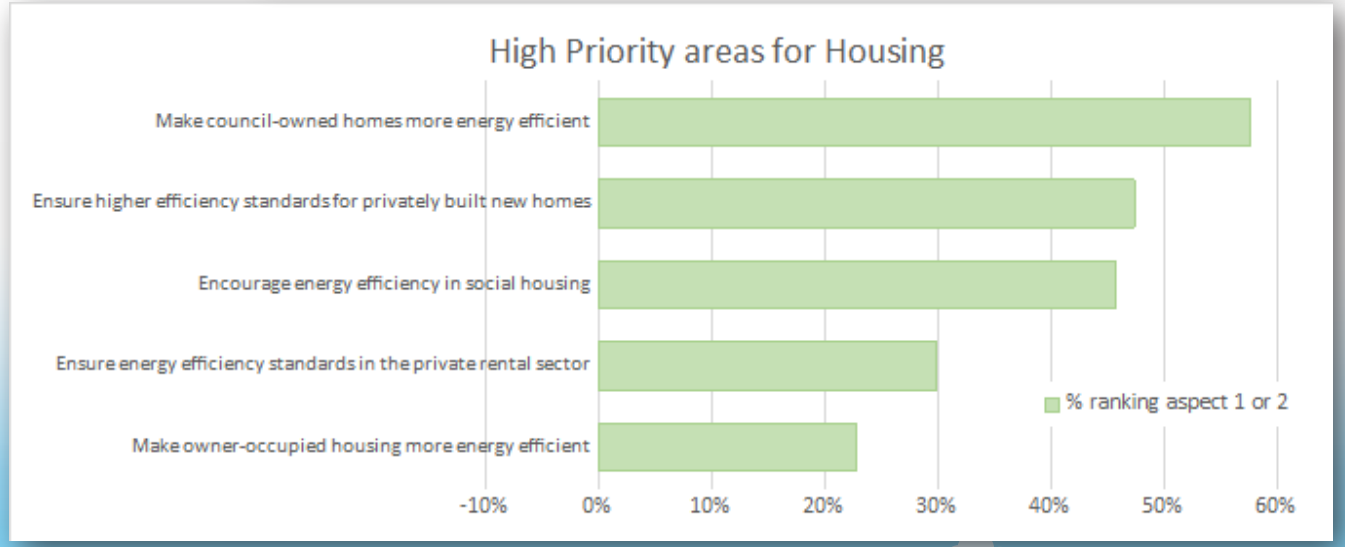
10

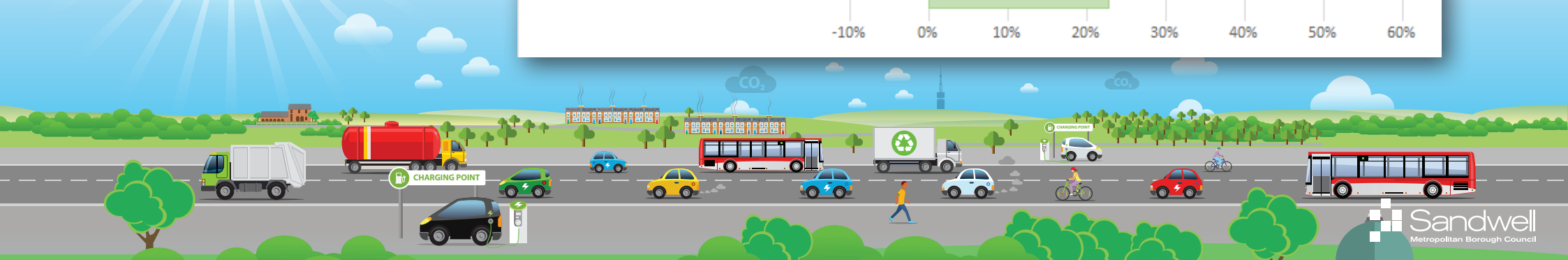
Appendix 3:
Results of the Sandwell Climate Change Consultation

Of the respondents to the survey, 57.9% were female, and 85.7% (541 people) were working aged adults aged 18-64. Only 23 responses were received from under 18s. The ethnic diversity of the respondents was not fully representative of the population, 80.3% were white compared with 69.9% of the general population.

The full list of options and percentage ranking each option highly are presented below, by sector.

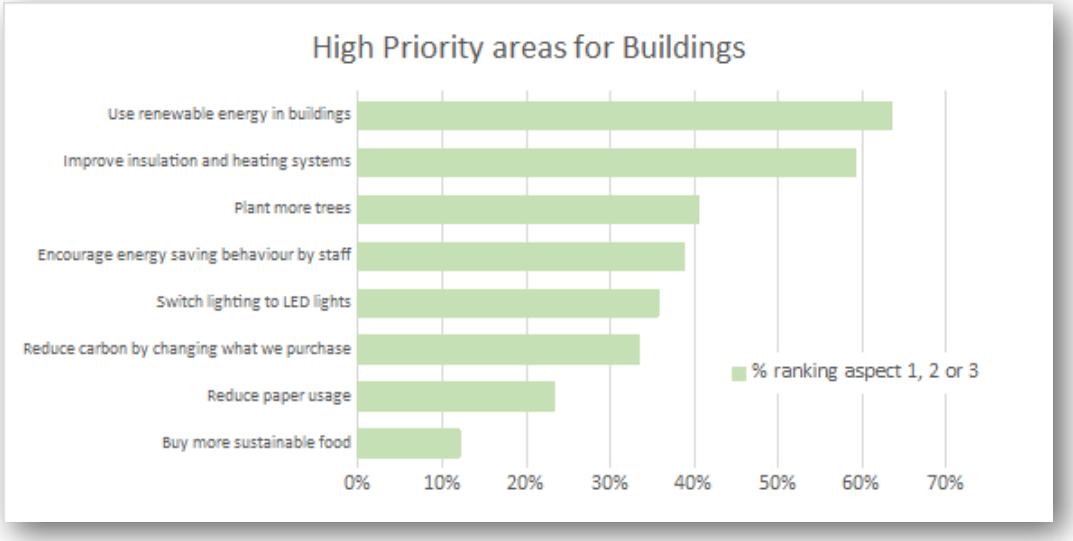


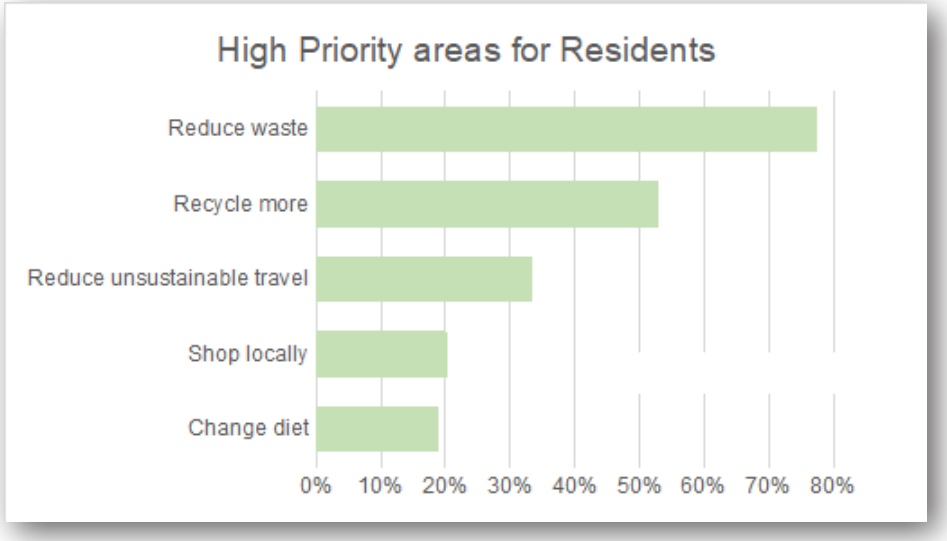


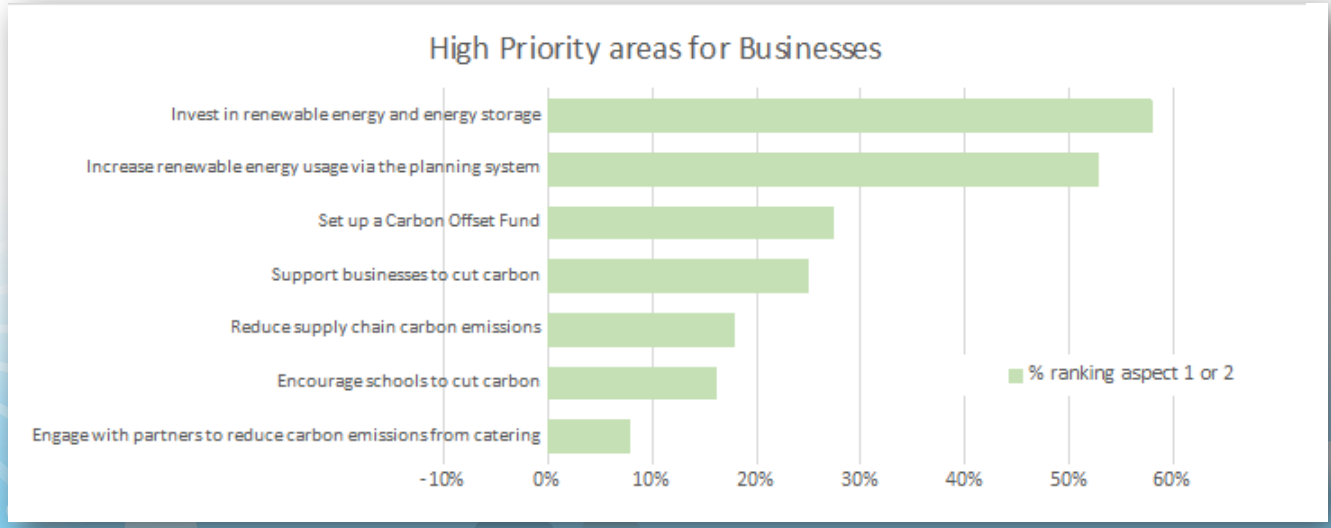


Sandwell Metropolitan Borough Council

Appendix 3: Results of the Sandwell Climate Change Consultation *(continued)*







Air Quality: **Sandwell**

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Deputy Director in Public Health
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Sandwell
Metropolitan Borough Council

Air Pollution: **Overview**

- **Nitrogen Dioxide** (NO_2)
  - Primarily caused by combustion engines (e.g. petrol/diesel cars)
- **Particulate Matter** ($PM_{2.5}$ and PM_{10})
  - 50% of $PM_{2.5}$ generated in towns and cities is from wood-burning stoves and coal fires[1]
  - PMs have the greatest associated health risks
  - PAH's are carcinogenic and form from wood burning
- Ground level **Ozone** (O_3)
- **Carbon Monoxide** and **Carbon Dioxide** (CO and CO_2)
- **Sulphur Dioxide** (SO_2)
  - 22% comes from domestic burning
- **Ammonia** (NH_3)
  - Agriculture is the main source

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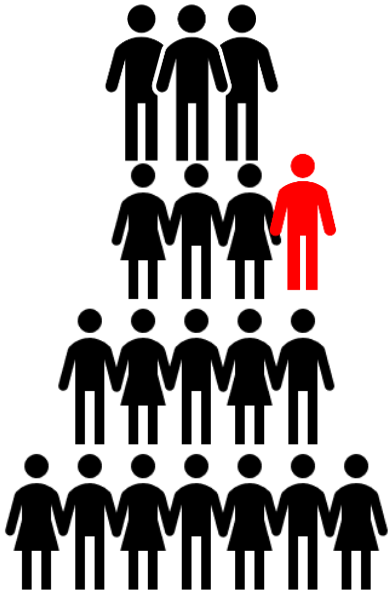
Air Pollution: **The Impacts**

- Long-term exposure to air pollution is **killing 1 in 19 people** in the **UK**[1]

- People with **asthma**, **pneumonia**, **diabetes**, and **respiratory** and **cardiovascular diseases** and the **elderly** and **children**, are especially susceptible and vulnerable to the effects of PM[3]
  - Sandwell has a higher than average emergency hospital admission rate for **respiratory illnesses**
  - Sandwell has the **highest diabetes prevalence** in the West Midlands, and the second highest **in all of the UK**[2]

- According to a report by the European Court of Auditors, more than **10 times** as many people die as a result of **air pollution** than are **killed in road accidents**



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Air Pollution: **Health**

Chronic Respiratory Diseases (e.g. Asthma)

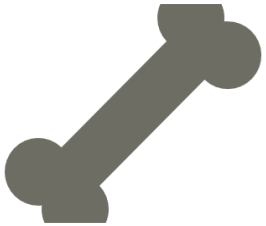
Stroke

Heart Disease

Lung Cancer[2]

Kidney Failure

Increase Infant Mortality Rate



Osteoporosis

Cancer

Sight Loss[4]

Sandwell Metropolitan Borough Council

Air Pollution: **Mental Health**

- Air pollution is linked to mental health problems. This includes **depression**, a reduction in intelligence equivalent to having **lost a year at school** (further impacted by Covid), and **aggressive** behaviour[1]
  - Research has also found an increased risk of **bipolar** disorder, **schizophrenia** and **personality disorders**[2]

Sandwell
Metropolitan Borough Council

Air Pollution: **Mental Health**

- **Children** have been found to be more **anxious** and **suicidal** in areas of deprivation that has worse air pollution[3]

- In 2015, Sandwell's estimated rate of 10.7% of 5-16 year olds with mental health disorders is the **highest** in the West Midlands region[4]
  - In 2019, Sandwell also had a **below average** GCSE obtainment rate[5]
  - Higher levels of air pollution exposure as children have been linked to below average **thinking** skills[6]

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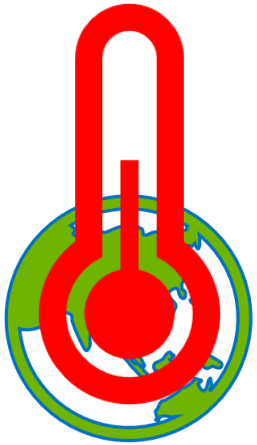
Metropolitan Borough Council

Air Pollution: **Climate Change**

- Many of the **sources of both CO_2** and **local air pollution** are the **same**, including vehicle exhausts, factory chimneys, energy and heating[1]
  - Road traffic is one of the largest sources of both greenhouse gases and air pollution
- **Burning wood** is degrading ecosystems and **undermining climate goals**, according to the European Commission's Joint Research Centre[2]



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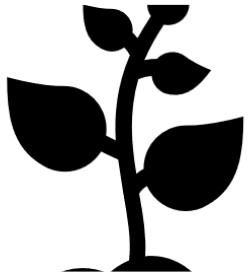
List of air pollutants and greenhouse gases

	Air pollutant	Greenhouse gas	Impacts human health
Particulate matter (PM2.5)	✓	✗	✓
Sulphur dioxide	✓	✗	✓
NO2	✓	✗	✓
Ground-level ozone	✓	✓	✓
Carbon monoxide	✓	✗	✓
Carbon dioxide	✗	✓	✗
Black carbon	✓	✓	✓
Lead	✓	✗	✓
Particulate matter (PM10)	✓	✗	✓
Methane	✓	✓	✓

Sandwell
Metropolitan Borough Council

Air Pollution: **The Environment**

Acidic Lakes & Canals[1]



Depleting Nutrients in Soil

Making Climate Change Impacts Worse

Reduced Growth & Crop Yield[2]

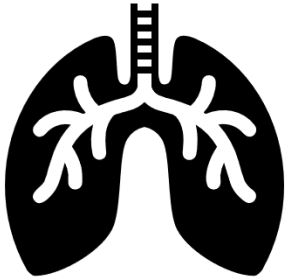
Acid Rain

Reproductive Failure & Birth Defects in Wildlife

Sandwell
Metropolitan Borough Council

Air Pollution: **COVID-19**

- Patterns of higher rates of coronavirus **incidence** and **deaths** in areas with high levels of **air pollution**[1]
- A small rise in people's long-term exposure to **air pollution** is associated with an **11%** increase in **deaths** from Covid-19[2]
- Another recent study suggests that **15%** of all Covid-19 **deaths** around the world are attributable to **dirty air**[2]
- Sandwell was one of the **worst Local Authorities** affected by Covid-19[3]



Sandwell
Metropolitan Borough Council

Sandwell: **So What's the Problem?**

- In 2005, monitoring found that national standards **were not being met**, so Sandwell was declared an Air Quality Management Area (AQMA)
  - Mainly due to NO_2 levels
  - In 2019, Sandwell **still** had 7 areas exceeding national standards
- In 2011, Sandwell had **190** hospital admissions for COPD and **244** asthma admissions **above** national average. This cost Sandwell **£640,000[1]**

Sandwell
Metropolitan Borough Council

Sandwell: **So What's the Problem?**

- Of the 72 areas with **dangerous** levels of $PM_{2.5}$, only Leicester and **Sandwell** were not in London[2]
- Sandwell has the **highest morbidity burden** in the West Midlands associated with PM air pollution
  - Sandwell has the **highest attributable deaths** percentage (6.9%) to PM outside of London

Sandwell
Metropolitan Borough Council

The Cost of Air Pollution

- Healthy life expectancy in Sandwell is lower than less deprived areas, which means people spend a lot more of their working life with ill health
  - As the retirement age increases, the problem of maintaining a healthy workforce increases
- Sandwell would benefit from growth in the "**Green**" industry sector, for both employment purposes and the subsequent pollution improvement

Sandwell
Metropolitan Borough Council

Air Quality Action Plan (AQAP)

1. Develop specific measures **with local communities** to reduce NO2 hotspots.
2. Promote **public transport, walking, cycling** and switching to zero emission vehicles.
3. Review the Council's impact on air quality including **Council fleet** and employee vehicles.
4. Support and **encourage taxi drivers** to switch to low emission vehicles.
5. Apply existing and adapt new **planning development** policies to support air quality improvements.
6. Publicity campaigns to encourage **behavioural change** around physical health and increasing use of low emission vehicles.
7. Partnership working with Birmingham City Council to minimise potential negative impact of the **Clean Air Zone**.

Sandwell
Metropolitan Borough Council

Faith Centres Air Quality Project

- The Air Quality team has been successful in bidding for funding from DEFRA
- The project is working with faith centres in Sandwell to help improve local air quality via behavioural change
- 8 faith centres will receive a screen in their centre that is linked to an air quality monitor put in nearby, as well as a toolkit and questionnaire

Sandwell
Metropolitan Borough Council

Air Pollution in Sandwell

- Citizen's Assembly for Air Pollution and Climate Change
- Working with schools, faith groups, communities, the private sector and climate outreach groups
- **If we managed to change behaviour so drastically in the space of a year for Covid, what could we do for air pollution and climate change?**

Sandwell
Metropolitan Borough Council

Any questions?

Report to Economy Skills Transport and Environment Scrutiny Board

4 March 2021

Subject:	Climate Change Implementation
Director:	Interim Director of Regeneration and Growth Tammy Stokes
Contact Officer:	Climate Change Programme Manager, Jo Miskin, jo_miskin@sandwell.gov.uk

1 Recommendations

1.1 To consider the report and the agree the Working Group's scope of involvement with the Climate Change Programme.

2 How does this deliver objectives of the Corporate Plan?

Achieving the target for Sandwell becoming carbon neutral by 2041, is arguably the most important piece of work the authority can undertake to meet the objectives of the Corporate Plan. The implications of not maintaining the rise in global temperatures to a maximum of 1.5 degrees are severe and widespread and are set out in this report. The World Health Organisation has stated that climate change remains the greatest threat to humanity and if we don't play our part in tackling this threat, we will be at risk of undermining everything else in the Corporate Plan.

	Best start in life for children and young people
	People live well and age well
	Strong resilient communities
	Quality homes in thriving neighbourhoods
	A strong and inclusive economy
	A connected and accessible Sandwell

3 Climate Change and its causes

3.1 What is Climate Change

Climate change can be described as changes to earth's climate leading to the warming of our planet, to more extreme, volatile and destructive weather patterns.

Examples of this include:

- The moorland fires in Staffordshire
- More frequent flooding e.g. of Bewdley and Ironbridge from the River Severn
- Drought conditions affecting agricultural crops
- Surface water flooding in urban areas due to intense rainfall
- Higher summer temperatures making it harder for the sick and elderly

There are of course many more examples that have been witnessed recently, such as the devastating wildfires in California and Australia, and the elevated levels of air pollution which affect China's residents daily.

3.2 What's causing climate change?

In essence, the answer to this question can best be described as being "Our way of life".

Almost every aspect of our daily lives has been built upon the availability of fossil fuels and we have become very dependent on their supply.

For example, the fuel we use to power and heat/cool our buildings, to power our vehicles, to drive our industries including agricultural food production, and the way we deal with waste. All of these activities produce 'greenhouse gases' which trap the sun's heat and are causing the planet's average temperature to rise.

4 Impacts, solutions and benefits

4.1 Potential impacts upon Sandwell

Unfortunately, almost nowhere on earth will be unaffected by the changes to our climate, and typically it is the poorest in society who suffer most, often because they already experience poor health and have limited financial means

to adapt. The following are some examples of how people in Sandwell may be affected:

- Poor air quality impacting upon residents' health
- Fuel poverty from people unable to heat or cool their homes
- Flooding of homes and businesses from overwhelmed drainage systems
- Vulnerability to rises in food prices from impacts on food-growing areas
- Extreme heat making it difficult for sick and elderly people to breath and to move around

4.2 Solutions to climate change

The actions that we need to take to tackle climate change are well established and have been known about for decades. It is only in the last few years that they are now being recognised as the only way for our societies and economies to function.

- Insulate all of our buildings
- Install low carbon heating systems
- Create heat networks
- Invest in renewable forms of energy
- Install the infrastructure to support low carbon forms of transport
- Increase use of public transport and encourage 'active travel'
- Encourage more efficient use of resources and reduce waste
- Support businesses to adapt to a low carbon economy
- Behavioural change

4.3 Benefits to tackling climate change

There are extensive benefits to society from tackling climate change, some of which are listed below and further information is contained in the appendix on the co-benefits:

- A more resilient borough able to withstand the impacts of climate change
- Reduced fuel poverty from increased home energy efficiency measures
- Opportunities for jobs and skills training from new green technologies

- Businesses able to compete in a decarbonised economy
- Improved physical and mental well-being, e.g. through ‘active travel’
- Better air quality leading to increased health
- More community cohesion, e.g. from community initiatives such as food growing.

5 Tackling climate change in Sandwell

5.1 Our Climate Change Strategy

In 2020, Sandwell Council adopted a new Climate Change Strategy, which sets out the rationale for why we need to respond, our targets for becoming carbon neutral and a series of high-level action plans, which cover the following areas:

- Council Estate and Operations
- The Built Environment
- Transport
- Waste & Recycling
- Adaptation and Resilience
- Natural Capital

5.2 Our emissions challenge

It should be made clear that our climate change targets are ambitious and challenging. We need to make significant cuts in the borough’s emissions and we need to do so quickly. To achieve ‘net zero’, we need to reduce our emissions as much as possible, and any which remain must be off-set.

- To achieve net zero for the council by 2030
- To achieve net zero for the borough by 2041
- We have a carbon budget of 9.1million tonnes from 2020 – 2100
- We will have used this up in **c.7 years** at our current rate
- We need to reduce our emissions by 13% every year until 2100
- Emissions in 2020 fell by only around 8%
- SMBC emissions are only c.1% of the borough’s

5.3 Our targets

It is important to understand what we are including and what we are *not* including in our targets for carbon neutrality.

We are including:

- Direct emissions from the fuel we burn to heat our buildings and power our vehicles
- In-direct emissions from fuels burned to generate power, i.e. electricity

We are *not* including:

- The goods and services we procure as a council and as residents.

6 Where are we now

The need to tackle climate change was first recognised internationally at the Earth Summit in Rio in 1992, however it was not until 2008 when the UK first passed legislation specifically around Climate Change – a commitment was made to reduce the UK's emissions by 80% by 2050.

In 2015, the Paris Agreement was signed, when countries from across the globe committed to reducing further rises in global temperatures to so more than 2 degrees, and ideally to 1.5 degrees.

In 2019, the UK government became the first developed nation to set a 'net zero' target for 2050. This hasn't yet been translated into specific targets for local authorities, but this is a logical next step in helping the government to reach that goal.

In 2020, Sandwell Council along with the WMCA both produced Climate Change Strategies, with joint targets for carbon neutrality by 2041.

COP26 in Glasgow which the UK is hosting, will almost certainly result in more focus on achieving the 1.5 degree limit.

6.1 Progress so far

- An agreed Strategy and targets for the way forward
- A Members Steering Group chaired by a Cabinet Member
- An Officer Working Group – authors of the Strategy
- Agreement to establish several themed implementation groups
- A small team to support the Climate Change Programme

Additionally, we have:

- Membership of the WMCA's Low Carbon Officer Group
- Access to examples of 'best practice' through membership of several networks
- Responded to offers of funding from central government
- Continued to work closely with Transport for West Midlands
- Highlighted that several Sandwell businesses already demonstrate 'circular economy' principles

7 Next Steps

As part of implementing the Climate Change Strategy successfully, a number of steps have been identified as being critical success factors:

- Embed climate change into corporate strategies and operational functions
- Continue to build commitment to climate change from top to bottom of the authority
- Climate change needs to be a core component for decision-making throughout the authority
- Develop a council-wide programme of Carbon Literacy
- Establish a borough-wide strategic partnership to oversee the Strategy's implementation
- Set up a partnership/network of businesses working towards the 2041 target

- Develop a portfolio of base-line data sets which will support informed decision-making around priorities
- Establish the ‘implementation groups’ to develop the Action Plans – Senior Lead/support
- Investigate the resources SMBC will need to access to implement the Strategy

8 Challenges

To help the Scrutiny Working Group consider its role with the Climate Change Programme, several challenges are presented below, which again must be faced in order to meet our climate change targets.

- To develop a strong corporate focus on climate change, despite the on-going pandemic
- The scale and speed of the emissions reductions required
- To identify the revenue and capital resources needed to deliver the Strategy
- To engage with residents, community groups, businesses, stakeholders and partner organisations to deliver the 2041 target
- To recognise and respond to the behavioural changes needed across the borough
- To make sufficient progress on our own 2030 target so that we can legitimately advocate for others to follow our lead
- To seek and be able to pro-actively respond to offers of funding from central government and ensure that Sandwell does not ‘fall behind’ further
- To recognise that some areas of our response will need greater level of support than is currently available

9. Appendices

Co-benefits of Tackling Climate Change

10. Background Papers

Climate Change Strategy

Appendix 1
Co-Benefits of Tackling Climate Change

20 January 2021

Climate Co-Benefits Definition

Climate co-benefits are defined as beneficial outcomes from climate action that are not directly related to climate change mitigation. Climate co-benefits enable boroughs to mobilise resources across borough departments and address multiple challenges at once.

Improving the lives of all Sandwell residents – leaving no one behind

- Warmer, healthier homes that are affordable to heat
- Poverty reduction/eradication – for example, reduced fuel poverty
- Encouraging changes in resident behaviour towards using less resources and minimising waste will mean less household income is spent on utility and food bills
- Security of tenure – for example, increased housing security for low-income urban populations who are more likely to live in poor quality, hazard-prone settlements
- Social inclusion – engaging groups that are traditionally excluded and addressing inequalities

Improving the health and well-being of Sandwell's residents

- Improved public health benefits - for example, reduced chronic and acute respiratory diseases due to improved air quality
- Physical and mental health benefits from walking, cycling and spending time in green space, such as reduced depression, diabetes, and dementia

Increasing the safety of Sandwell

- Reduced traffic improves air quality
- Reduced congestion creates safer roads for walking and cycling
- Flood prevention and water quality improvements
- Enhanced resilience – making the Borough more able to quickly recover from shocks

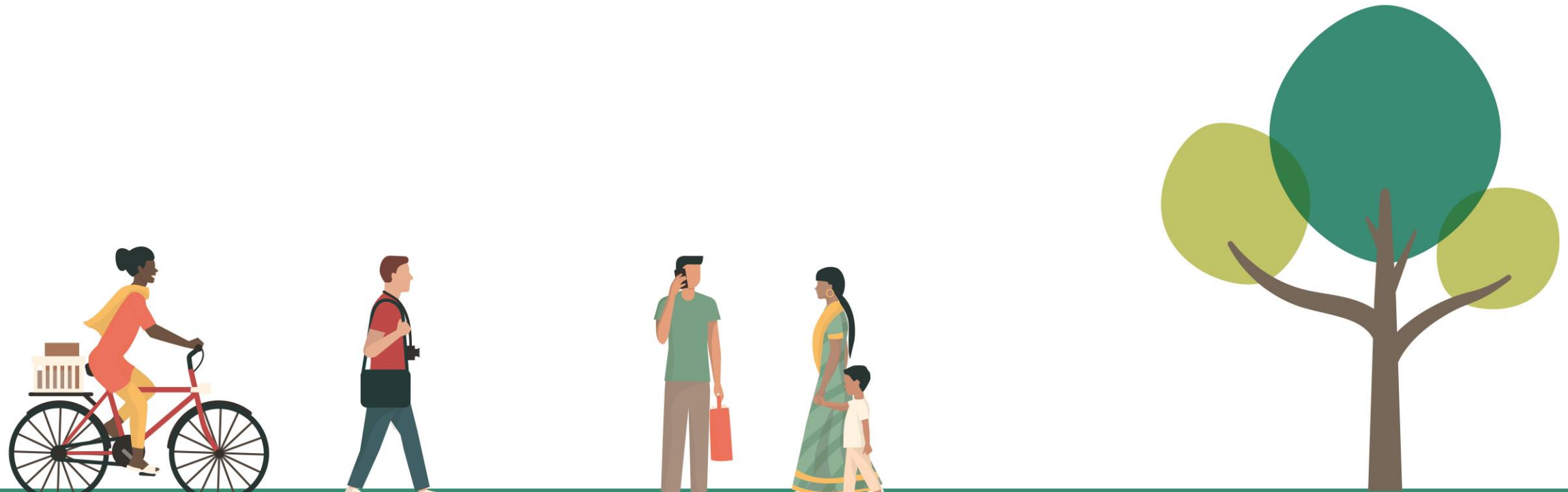
Improving Sandwell's economy

- New job creation from green innovation and more opportunities for skills training
- Improved public transport linkages bring economic benefits, ease of access to work, and car and van drivers will benefit from savings in fuel costs
- Greening the economy – making economic activity in the Borough more environmentally sustainable
- Promote circular economy – for example, supporting greater reuse and recycling of resources

Protecting and restoring Sandwell's natural environment

- Nature conservation and biodiversity improvement - for example, increased connectedness between green spaces
- Greening the Borough – increased green spaces improves the appearance of Sandwell to attracts residents, workers and businesses to relocate to the Borough

Climate Change and the ESTE Scrutiny Board



What is Climate Change?

Changes to earth's climate leading to the warming of our planet, to more extreme, volatile and destructive weather patterns.

Examples of this include:

- the moorland fires in Staffordshire
- more frequent flooding e.g. of Bewdley and Ironbridge from the River Severn
- drought conditions affecting agricultural crops
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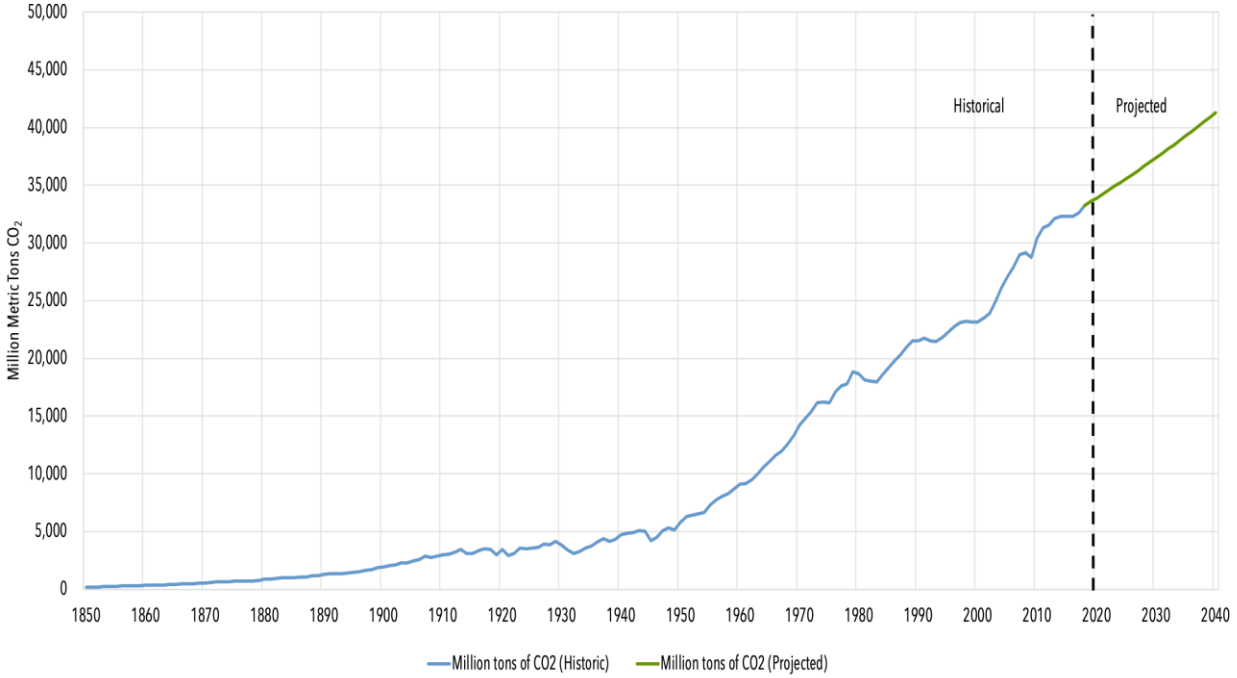
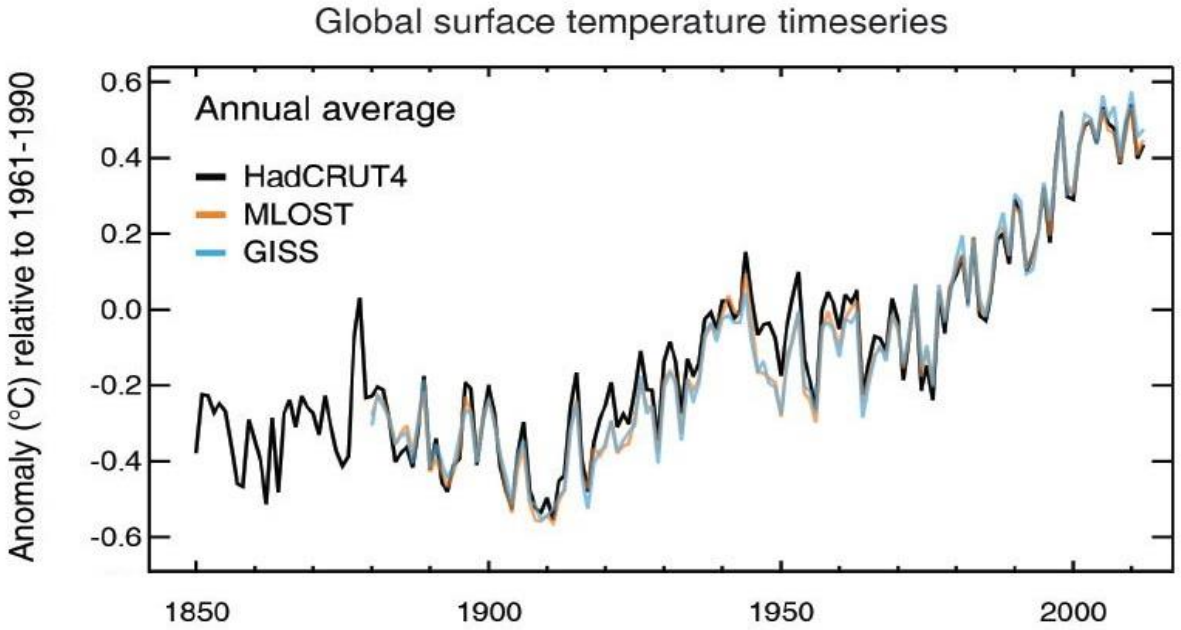
What's causing climate change?

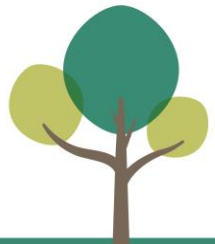
Our way of life.
The fuel we use to power and heat/cool our buildings, for our vehicles, for our industries and for our food production, and the way we deal with waste, all produce Greenhouse Gases which trap the sun's heat.



Graph indicating how global CO2 emissions have risen from c.1850 and projected until 2040
(Centre for Climate and Energy Solutions)

Graph indicating the rise in global temperatures from c.1850 to present day
(IPCC and Carbon Brief)





The potential impacts of climate change in Sandwell?

- Poor air quality impacting upon residents' health
- Fuel poverty from people unable to heat or cool their homes
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- Extreme heat making it difficult for sick and elderly people to breath and to move around

What are the solutions?

- Insulate all of our buildings
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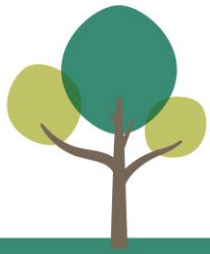

What are the benefits of tackling climate change?

- A more resilient borough able to withstand the impacts of climate change
- Reduced fuel poverty from increased home energy efficiency measures
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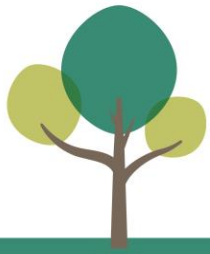
- Businesses able to compete in a decarbonised economy
- Improved physical and mental well-being, e.g. through ‘active travel’
- Better air quality leading to increased health
- More community cohesion, e.g. from community initiatives such as food growing

Policy Context

- 2008 Climate Change Act – 80% reduction in emissions by 2050
- 2015 Paris Agreement – limit the increase in earth’s temperature to 2 degrees and ideally 1.5 degrees
- 2019 UK Government commits to become ‘carbon neutral’ by 2050
- 2020 Sandwell MBC and the WMCA produce Climate Change Strategies
- 2021 COP26 in Glasgow – likely to be preceded by further commitments as well as result in further commitments



Sandwell's Climate Change Strategy

- Two key targets – 2030 and 2041
- Analysis of our current emission levels
- Series of Action Plans setting out what we need to do – these are 'high-level' actions

Our emissions challenge

- To achieve net zero for the council by 2030
- To achieve net zero for the borough by 2041
- We have a carbon budget of 9.1million tonnes from 2020 – 2100
- We will have used this up in **c.7 years** at our current rate
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What our targets include

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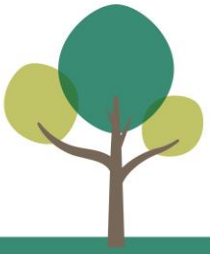
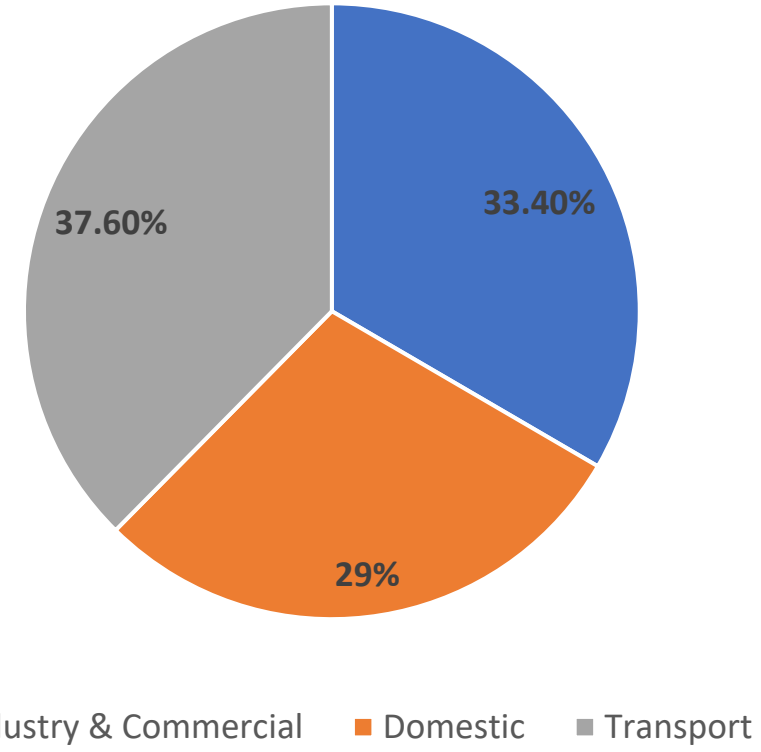
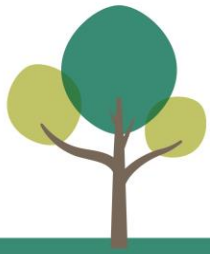


Sandwell's Carbon Emissions 2017

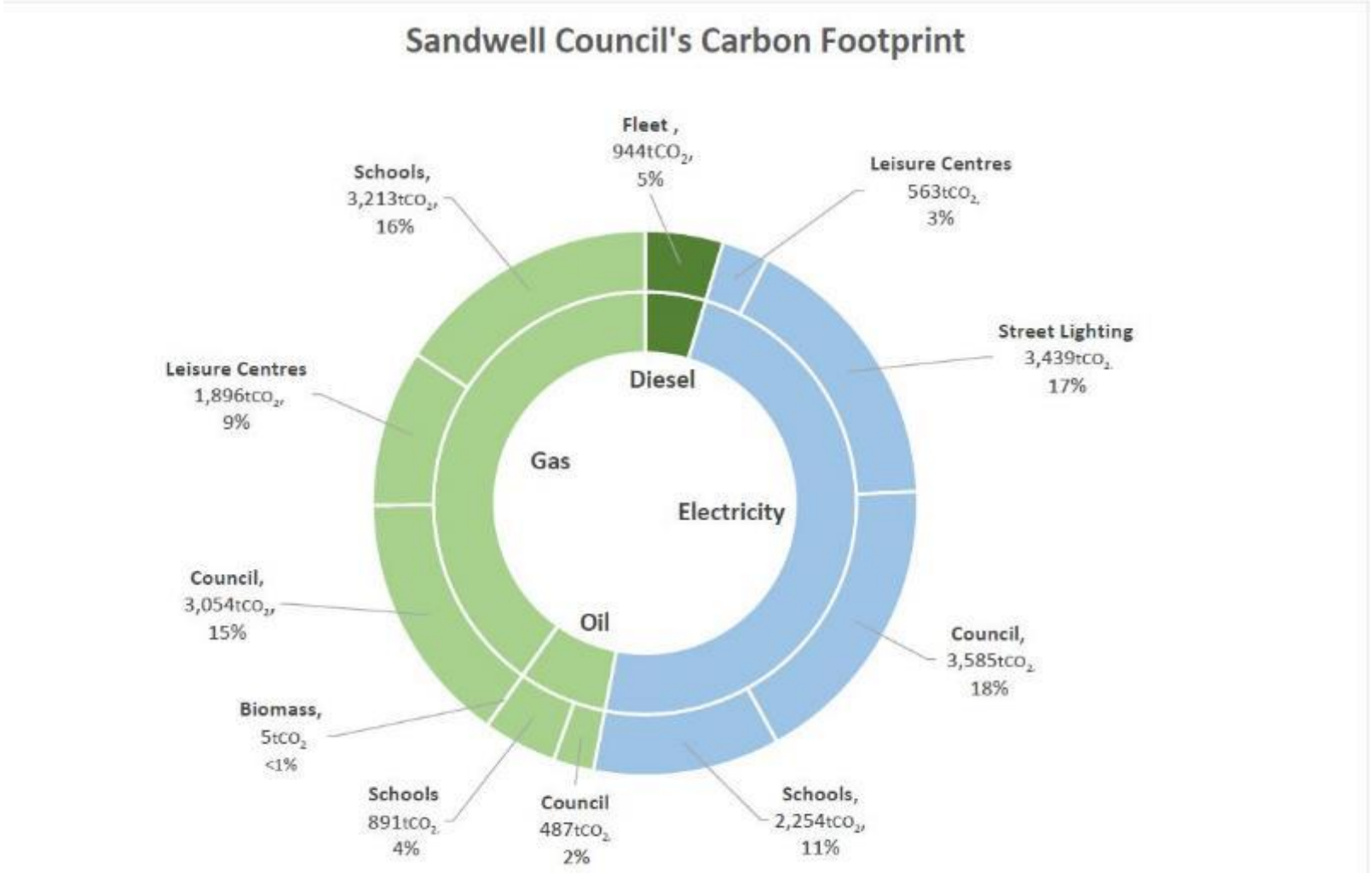




- **Sandwell MBC's Emissions**

- Council Buildings 35%
- Schools 31%
- Street Lighting 17%
- Leisure Centres 12%

- Gas 40%
- Electricity 49%
- Oil 6%
- Diesel 5%



Where are we now?

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- Several Sandwell businesses already demonstrating 'circular economy' principles

Next steps

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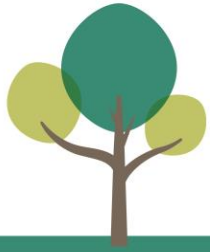

Challenges

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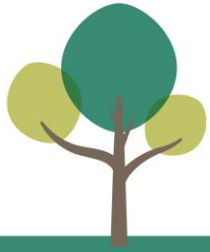

Conclusion

There are many strong reasons for why we should address the causes and impacts of climate change:

- Economics – the UK and global economies are decarbonising
- Scientific – finite resources
- Environmentally – our emissions/impacts on people/impacts on biodiversity
- Socially
- Our reputation
- Our responsibility