

Appendix 5

Corporate Climate Change Action Plan

2022 - 2025

Jo Miskin
Climate Change Programme Manager

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Purpose of Action Plan

The purpose of this Action Plan is to set out the council's priorities and proposed actions to meet our 2030 and 2041 targets for reaching net zero.

It lays out clearly what our priorities are, what is involved in meeting them and provides Members with an overview of our climate change work in the coming years. The report also gives Members the opportunity to examine our approach and help determine how we meet our objectives.

Critically however, this Action Plan is also designed to put climate change firmly onto the council's corporate agenda, enabling us to ultimately become a net zero organisation and one that is the borough's strongest advocate for climate change action across Sandwell.

Introduction

This Action Plan is based on the council's Climate Change Strategy (see Appendix 8) and sets out our priorities and our approach to tackling climate change over the next few years.

In terms of achieving the council's 2030 target, a clear hierarchy is laid out for our own estate and operations which are responsible for the majority of our emissions.

Key activities which move the borough towards the 2041 target are also included.

Reaching net zero by 2030 is not just about having low emissions at that point, but about being on a falling trajectory *en route* to 2030. The same is the true of the 2041 target. To stay within our carbon budget, we need to be reducing emissions immediately.

Several of the activities proposed in this plan are undoubtedly challenging both in terms of the scale of work required and the need to engage with our residents, communities and businesses and to persuade them of the urgency and degree of change required.

Few of the objectives within this report can be achieved quickly. This is the first of several action plans that need to be implemented during the next decade in pursuit of our 2030 and 2041 targets.

Whilst we know in principle in which areas we need to be active (e.g. transitioning our schools to net zero), in many cases we don't yet have a base-line of data to provide the necessary evidence of what specific actions are required, how much carbon can be reduced or how much investment is required. All of this will lead to work streams to be developed by the new governance arrangements.

Rationale for Acting

Climate change is now widely recognised as one of the largest threats to human health, our economy, and our way of life.

Despite the immense disruption that the Covid pandemic has caused, climate change remains a much larger threat to our way of life. In the second half of this century, the

impacts of climate change on human health could be similar to an *annual* global pandemic. The impacts on our economy could be similar to a global pandemic every *decade*.

To minimise the effects of climate change, the world has agreed to work together to limit the increase in global temperatures to no more than 1.5 degrees. All areas, including Sandwell, have a role to play in meeting this goal. Our corporate targets of net zero for the borough by 2041 and for Sandwell Council by 2030, are both compatible with supporting the maximum 1.5 degree temperature rise.

The proposals in this report, do not just focus on the need to reduce our emissions (mitigation), but to ensure that Sandwell is resilient to the impacts of climate change (adaptation). We know that the impacts of climate change are greater on the poorest and most vulnerable members of society and so in Sandwell, we will need to go further than other areas to protect and support our residents.

Current Situation

In order for Sandwell to be net zero by 2041, we need to stay within a defined carbon budget of **9.1million tonnes**. The modelling defines the budget period as being up to 2100.

Based on the latest data available, Sandwell produced 1.4million tonnes of carbon in 2018, which without any change in activities, sets us on a course for producing **115million tonnes** by 2100, rather than **9.1**. We will have used up our carbon budget in the next 6 to 7 years, unless we begin to make *significant* reductions in the borough's emissions.

Despite the massive shock to the economy caused by the pandemic, emissions only reduced by 5% - 7% - to reach 2041, our emissions need to decrease by 13% every year.

We won't get to *absolute zero* carbon emissions and so it is vital that we find ways to absorb some of the borough's emissions, whilst remembering that emission reductions must be our top priority, rather than seeing absorption as a way of allowing emissions to continue

Our sphere of influence/Areas we can influence

In addition to the difference we can make to emissions from our own estate and operations, we also have a wider influence on the borough in several areas which will support our 2041 target for net zero.

- Our procurement of goods and services. We can work with our contractors and suppliers and encourage them to reduce the emissions associated with the goods and services they provide (see Appendix 5)
- Planning – where we can, we only give permission for development that is compatible with our climate change objectives
- Our Housing Stock – we can directly influence c.20% of the borough's homes (see Appendix 6)
- EV charging infrastructure
- Provision of walking and cycling infrastructure

- Parking charges/Parking Levy – use levy to encourage businesses to work with their employees to help support the movement away from car journeys as well as from the most-polluting vehicles (see Appendix 7)
- Supporting low-income households to take up the incentives offered through the council’s Eco3 and LEAP schemes
- Giving companies recognition and support that are already involved in, or moving towards ‘circular economy’ principles or trading in the low-carbon and environmental goods sector
- Household waste and recycling – we can influence how much of the borough’s waste is recycled and how energy efficient the collection service is.
- Greening the borough – we can directly influence how ‘green’ Sandwell becomes
- Behavioural change – we can influence the behaviour of residents through, for example publicity campaigns
- Building a borough-wide strategic partnership of key organisations and businesses that can help support reaching the 2041 net zero target



Figure 1: Spheres of local authority influence over emissions¹⁴

Policy Context

Throughout the duration of the Climate Change Programme, the Council will also need to consider and adopt new policies and plans relating to the climate change agenda. There are already national and regional policies and initiatives in development that can support this and provide officers with the policy context needed to adopt new approaches.

- **Black Country Plan** – the emerging Black Country Plan contains many policies around both climate change, the natural environment, air quality, design and transport which will provide a strong foundation to much of the activity that will be delivered by the Climate Change Action Plan.
- **UK Environment Act 2021** – The Environment Act sets clear statutory targets in four priority areas: air quality, biodiversity, water and waste, and includes new targets to reverse species decline by the 2030. The Act also includes the transition to a circular economy, encouraging people and businesses to recycle more and reducing the volume of waste generated. It will be crucial for local authorities to adopt additional requirements the Environment Act mandates.
- **UK Climate Risk** – The recent publication of the Climate Change Risk Assessment (CCRA) assessed 61 risks and opportunities from climate change in England including housing, the natural environment, infrastructure, businesses and health impacts. The evidence presented identified eight risk areas that require the most urgent attention in the next two years, and to address the widening gap of risks faced with the level of adaptation measures currently in place. The Climate Change Programme Team are currently exploring options to commission a localised Adaptation and Resilience Report specific to Sandwell.

Co-benefits of climate action

The need to reduce emissions of greenhouse gases is now widely understood and largely accepted. The benefits of addressing climate change however are often not stated but need to be understood and shared to help build more support for climate change action.

Addressing climate change will benefit the borough's residents, communities, businesses, infrastructure, reputation and environment. Conversely, failing to respond adequately will impact negatively upon those areas too.

Economic

Nationally and globally, economies are moving away from traditional models based upon the on-going availability of fossil fuels and other natural resources, towards low-carbon models and a circular approach. Sandwell's businesses, if supported correctly, could benefit from these economic changes, providing new opportunities for employment and the development of new technologies.

Action on climate change creates regeneration opportunities and so responding to this agenda supports our ambitions to regenerate Sandwell.

Tackling congestion on Sandwell's roads will benefit our businesses, who will see improved reliability of their logistics operations.

The need to retrofit the borough's buildings (private/commercial/public) will create new markets, skills training, apprenticeships and economic activity.

Social

Retrofitting the borough's housing stock will provide warmer and healthier homes for our residents. Homes will also be easier and cheaper to heat, bringing more people out of fuel poverty. Encouraging more people to walk and cycle more will lead to improvements in both physical and mental health. Neighbourhoods which have been enhanced with tree planting and other forms of vegetation, will improve people's local environment, their well-being and sense of local pride. Less traffic on the road network will lead to an improvement in air quality which will support residents with poor health and provide a cleaner environment for families to thrive.

Reputation

Taking positive action to tackle climate change and to benefit the borough will enhance SMBC's reputation as an organisation that acts responsibly and in the interests of its residents. A borough that is greener as a result of increased tree planting, will be more attractive not only to existing residents, but to businesses and to those considering whether to live and work in Sandwell.

Infrastructure

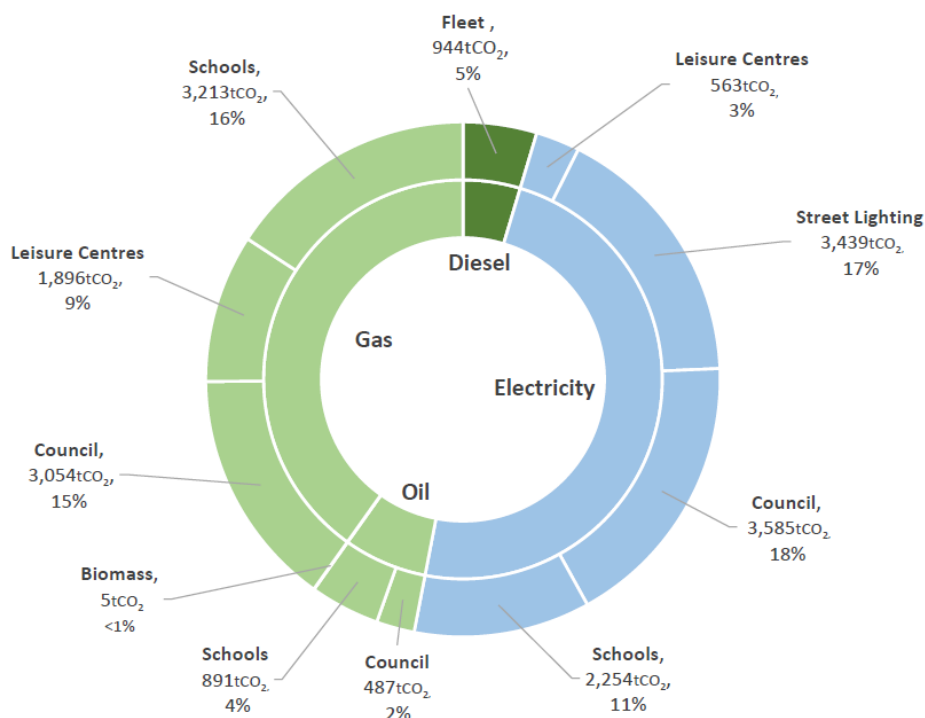
As with the rest of the UK, our facilities (leisure, health etc) and our infrastructure (transport network, energy grid, water and sewage networks) are all vulnerable to the impacts of climate change. By responding proactively to these threats improves the resilience of Sandwell and avoids the impacts of catastrophic events, such as loss of water/energy from flooding.

The following text sets out the plan for SMBC activity around climate change to meet in our 2030 and 2041 corporate targets for net zero.

Council Estate & Operations

The chart below shows the direct and indirect emissions for which we as a local authority are responsible, with our corporate buildings being the largest contributor (47%), followed by schools (31%), street lighting (17%) and fleet (5%).

Sandwell Council's Carbon Footprint



The following text sets out the steps required that will start to reduce emissions from all of these areas. As will be discussed elsewhere in this report, we will not be able to reduce our emissions to absolute zero, which means those residual emissions will have to be off-set (absorbed) through tree planting.

Corporate Building Stock (47% of emissions)

How to reduce emissions

To reduce emissions, we need to reduce the demand we make for energy from the national grid. In terms of the buildings themselves, this would include:

- insulating the walls and roofs and replacing windows
- installing low-carbon forms of heating, e.g. heat pumps
- using more efficient lighting
- use energy efficient devices and machines
- installing Solar PV
- investing in Building Energy Management Systems
- factoring energy use into considerations around assets and occupancy times

In terms of the building's occupants, this means we must change behaviour so that people:

- only use the energy they need
- recognise the need to conserve energy
- develop good environmental practices, e.g. recycling waste

What we need to do

- Decide what buildings we are intending to dispose of and retain
- Begin to produce schemes for the buildings with the highest footprint. For example, we know that for our entire building stock (including schools), 75% of emissions come from only 27% of buildings
- Develop and deliver a programme of Carbon Literacy to help staff understand how to change behaviour to reduce greenhouse gas emissions
- Waste in our buildings – all should have facilities for separating waste, including food waste
- Off-set the emissions we can't avoid

The capital costs of carrying out the above works on our estate will run into many of millions, some of which will need to be funded by government grants. Currently, there is no clear timetable from the government about when funding will be available, however this will of course have a significant bearing on our ability to reach 2030.

Based on very recent experience of government grants for this type of work, the timescales are not compatible with our own internal processes for getting grant applications approved. As external funding is likely to play such an important role in us reaching 2030, we may need to review our approval processes, to avoid the risk of losing out on investment opportunities.

Who is responsible

Strategic Assets and Land Interim Service Manager

Timescale – Our corporate buildings need to be net zero by 2030.

School Buildings (31% of our emissions)

Although our approach to reducing emissions from schools is very similar to that of our corporate buildings, the key difference between them is our limited ability to control how schools spend their money and use their buildings. Consequently, it will be much more challenging to reach 2030 net zero for our schools, than for our corporate buildings. Funding for school buildings is generally limited to regular maintenance and does not allow for the type of long-term investments which are required to reduce emissions.

How to reduce emissions

To reduce emissions, we need to reduce the demand we make for energy from the national grid. In terms of the buildings themselves, this would include:

- insulating the walls and roofs and replacing windows
- installing low-carbon forms of heating, e.g. heat pumps
- using more efficient lighting
- use energy efficient devices and machines

- installing Solar PV
- investing in Building Energy Management Systems
- factoring energy use into considerations around assets and occupancy times

In terms of the building's occupants, this means we must change behaviour so that people:

- only use the energy they need
- recognise the need to conserve energy
- develop good environmental practices, e.g. recycling waste

What we need to do

To understand the scale of the challenge required, a pilot study will be carried out on a cross-section of the borough's schools, looking at the measures needed to move them towards net zero. The study will provide information on the complexity of working on school buildings and will provide base-line data, from which an overall cost for the school estate can be estimated.

We will also continue to access government funding to support moving both our corporate stock and our schools to becoming low carbon.

Who is responsible

Group Head for Education Support Services/Senior Energy Officer

Timescale – Our schools need to be net zero by 2030

Street Lighting (17% of emissions)

How to reduce emissions

Around 70% of publicly owned street lighting has already been converted to run on LED bulbs, however this still leaves 6,705 street lights on the adopted highway which will need to be converted to also run on LED bulbs.

What we need to do

In order to convert the remaining street lighting to LED, a capital investment of £2,673,545 is required.

Who is responsible

Highways Service Manager

Timescale

Once the funding has been secured, the conversion to LED could be completed in 12 months.

Fleet (5% of emissions)

The council's fleet of over 500 vehicles, makes up 5% of our emissions, from the petrol and diesel required to fuel them. The fleet of vehicles operated by SERCO for household waste collection and street cleansing, does *not* sit within the council's reportable emissions. Typically, council fleets which *do* include waste vehicles, make up around 15% of authority emissions. The availability and cost of low carbon RCVs, will present challenges to converting SERCO's fleet by 2030.

How to reduce emissions

Review the council's fleet and look at the possibilities of reducing the number of vehicles and assets. Replace existing fleet with fully electric counterparts wherever this is possible.

What we need to do

To replace the council's LCV fleet to fully electric vehicles will require in addition to the budgeted vehicle replacement cost an estimated capital investment in excess of £15m. The council will also need to invest in the charging infrastructure in Sandwell.

Who is responsible

Waste & Fleet Services Manager

Timescale

The transition to fully electric vehicles has begun. It is anticipated that all council procured vehicles under 3.5 ton will be fully electric by 2030.

Procurement

Emissions from our Procurement (the goods and services we buy) are known as our Scope 3 emissions – whilst we can influence them, we can't directly control them. We know what our Scope 1 & 2 emissions are (from electricity/gas/oil/petrol/diesel) but don't know how this compares with our Scope 3 emissions.

What we need to do

We need to undertake a detailed study which examines the goods and services which we procure and aims to provide evidence of those activities with the highest emissions so we can prioritise how we respond.

We also need to adopt procedures so that climate change is a key consideration when tendering for goods and services which require contracts. This will help to reduce emissions associated with our procurement and provide evidence of how we are working towards becoming a net zero organisation.

To support the local economy and to reduce the mileage associated with our procurement, we should also look to increase the use of our local supply chain (see Appendix 4)

How we do it

Options include including climate change as a metric when procuring goods/services which require a contract.

This can be done in two ways. For large value contracts which have the potential for a high carbon footprint, a climate change metric will be used when awarding contracts. For smaller value contracts, we will utilise the existing Social Value metric, which will enable us to also include criteria relating to climate change.

Finally, we can produce an 'ask' of *all* of our contractors and suppliers which sets out our expectations of them, in terms of how they should consider the impact of their operations.

Who is responsible

Procurement Service Manager

Timescale – Our procurement falls outside of the 2030 target and needs to be a net zero by 2041.

Decision Making

What we need to do

We need to ensure that as an organisation, we take account of the impacts of our activities upon climate change. A formal process for this enables climate change to be embedded in our decision-making processes and provides evidence that we are adopting the types of good practice that we are advocating across the borough.

How we do it

A mechanism can be put in place so that all reports that go to Members, or all 'decisions' to be taken by a Member or Director, must be able to demonstrate evidence that the impact on climate change has been considered.

Other local authorities have already put procedures in place for this to happen, with many developing 'decision-making tools' for officers to use (see Appendix 3).

Who is responsible

The process of putting a mechanism in place will be led by the Democratic Services Manager.

Timescale – implementing this is one of the most straightforward actions within the plan and should be completed within 12 months.

Carbon Literacy

Our aim to become a net zero organisation will be significantly enhanced when officers and members understand the implications of their actions upon climate change. It will support decision making processes and mean we have the required knowledge to ensure our actions are compatible with our net zero targets.

What we need to do

Recognised Carbon Literacy training already exists, and has been developed for:

- Cabinet Members
- Elected Members
- Senior Leaders
- Officers

We need to develop a programme of training to be delivered across the authority, which is targeted appropriately at all levels.

How we do it

APSE, a support organisation for local authorities, will deliver Carbon Literacy training for cabinet members and senior leaders.

Officers from HR, working with the Climate Change Programme Team, will develop a tailored programme of training to be delivered to officers, which will include formal training, e-learning and briefing sessions.

It may be appropriate to limit the formal training to H-graded officers and above, however individual directorates would have the discretion to put lower graded officers through the training if it was thought to be particularly relevant to their roles.

Subject to the availability of resources, APSE could deliver training for elected members, however, the Local Government Association may be able to do this too.

Our officer group of Climate Change Champions would also have a role in supporting the roll out of Carbon Literacy training, as many have already been trained and will already be embedded in Service Areas across the authority.

The council will also explore incentives to encourage staff to transition towards EV.

Who is responsible

HR Service Manager

Timescale

Could be 12 months to get it delivered but will depend upon final decision about which level of decision makers attend which courses.

Reducing emissions from transport

(37% of the borough's emissions)

How to reduce emissions

Transport is the largest source of emissions in Sandwell, at around 37%. We know that simply transitioning all cars to EVs will not be enough to make the reductions needed from transport emissions. We therefore need to focus on providing residents with alternative means of travel, including the infrastructure to make cycling, walking and public transport attractive and viable options.

This will require the creation of a high-quality walking and cycling network across the borough, providing linkages to key destinations, as well as the investment to make these routes attractive, such as public realm and green infrastructure.

To make bus travel a more reliable and attractive form of transport, the principle of re-allocating road space needs to be accepted. Inevitably, there are instances in which this will impact on car journeys, however the benefits from fewer cars on the road are many and varied and will have wider benefits for our communities. These include improved air quality, safer streets and better health outcomes resulting from more active forms of travel.

We also need to develop the infrastructure required to support a borough-wide network of EV charging points, including rapid and ultra-rapid.

Data on travel patterns indicates that high numbers of vehicles on Sandwell's roads are from people driving into Sandwell to work, though this is also the case for people driving out of Sandwell to work in other areas of the West Midlands. Ultimately, we need fewer car journeys made and this requires behaviour change and that involves engaging with residents and employees borough-wide, e.g. talking to schools and businesses and working with them to develop travel plans.

What we need to do

- Continue to seek funding to expand our network of walking and cycling routes
- Agree internally and subsequently with neighbouring authorities to the principle of road-space reallocation
- Work with schools and businesses to develop/implement travel plans
- Continue to work with TfWM to improve public transport
- Develop the borough's infrastructure to support Electric Vehicle charging
- Consider the introduction of a parking levy to reduce congestion from commuting and to raise revenue to support transport improvements.
- Consider the introduction of congestion charges that will help improve air quality, encourage more use of public transport and provide an income stream for improvements in transport infrastructure

Who is responsible

Highways Service Manager / Regeneration & Growth Service Manager

Timescale – emissions from transport need to be at net zero by 2041

Reducing emissions from existing homes

(30% of the borough’s emissions)

Sandwell’s 127,000 homes account for just under one third of the borough’s emissions. The mixture of tenancy and ownership of these homes presents challenges in working in this sector. Around 27,000 of these homes belong to the council which gives us the opportunity to improve a significant proportion of the borough’s dwellings. For clarification, our stock of council-owned homes does *not* fall into our 2030 target and instead into our 2041 target. Although we own the buildings, we cannot fully control how they are used by the tenants, which makes reaching net zero a much more challenging target.

Our plans for improving homes need to recognise that around 80% of the homes that will be standing in 2050, are already built, so whilst we do need to address the standard of new builds, our greatest effort should be on the existing stock.

How to reduce emissions

To reduce emissions, we need to reduce the demand made for power and heat from the national grid. In terms of the buildings themselves, this would mean:

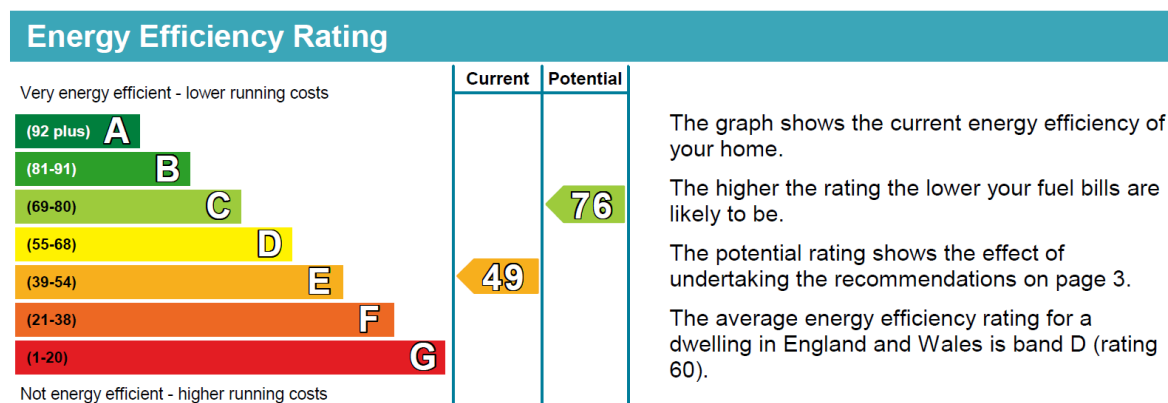
- insulating the walls and roofs and replacing windows
- installing low-carbon forms of heating, e.g. heat pumps
- using energy efficient devices and machines
- installing Solar PV

In terms of the building’s occupants, this means we must change behaviour so that people:

- only use the energy they need
- recognise the need to conserve energy
- develop good environmental practices, e.g. recycling waste

What we need to do

In line with the *Committee on Climate Change’s* recommendations, put plans in place to bring our own stock of houses up to at least EPC C rating. At the same time, develop plans for how we then move our stock towards becoming as close to net zero as possible, which would mean achieving an A rating. A score of 100 is given to a property which is carbon net zero, which as the image below shows, means achieving a rating of A is ideally required.



The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

This may involve establishing which properties are best suited to being retrofitted and which may be better targeted with Solar PV. A feasibility and cost analysis of moving from EPC C to A would be beneficial in enabling us to plan for how we reach net zero with our own housing stock by 2041.

We also need to work with owner occupiers and the private rented sector in bringing their homes up to at least an EPC C rating, and as opportunities arise, support them to transition properties to net zero.

We are already working with the WMCA on the development of a borough-wide scheme for retrofitting homes and other buildings and should continue with this scheme

The council runs several domestic energy saving schemes for residents, and these should be promoted as widely as possible.

For many homes, the only way to reach net zero will be through installing Solar PV, to off-set any residual emissions. Tree planting is also going to be required to help off-set any other remaining emissions which cannot be avoided from the borough's homes.

Who is responsible

Asset Management and Maintenance Service Manager / Housing Management Service Manager

Timescale - emissions from transport need to be at net zero by 2041

Reducing emissions from new homes

The government's Future Homes Standards due to come into effect from 2025 means that all new homes will need to be carbon net zero ready, and so once the national grid decarbonises in around 2035, these homes should become carbon net zero. From June 2022, any new homes that haven't already received planning permission, will have to be at least 31% more energy efficient than current standards.

This does mean however, that homes can still be built in the next three years which won't adhere to net zero standards. As a council, we need to adopt the principle of building only low-carbon homes, in line with many other authorities. For homes being built by developers, the current planning guidelines make it harder for us to insist that they build only low-carbon homes, though this will change with the adoption of the Black Country Plan in 2024.

How to reduce emissions

As far as possible, we need to ensure that the new homes we build ourselves are carbon net zero ready. This should take into account not only the standards of the buildings, but also the embodied carbon in the building process and materials.

What we need to do

We are currently undertaking several pilot schemes to help inform our future approach and standards across different housing types, e.g. the inclusion of Solar PV on all homes. Ultimately, we should then look to adopt a set of building standards which are compatible with homes being carbon net zero whilst balancing their affordability.

We are also looking at several schemes for heating properties which use Air Source Heat Pumps, either for individual homes or to serve a group of homes, and again this will help to inform our future approach to providing heat.

An evaluation on our workforce is needed to help our staff develop a new set of skills which will enable them to maintain the new technologies we need to develop, e.g. solar panels.

We need to be regularly reviewing new technologies available in the market place to ensure that we are continually up-to-date in our approach as well as maximising opportunities to connect with heat networks in specific localities.

Who is responsible

Regeneration & Growth Service Manager

Timescale – the pilot schemes will be completed by 2024, after which we will be able to adopt our standards for the new builds which we complete ourselves.

Reducing emissions from businesses

(33% of the borough's emissions)

Sandwell's businesses are responsible for around 33% of the borough's emissions and so it is essential that we do everything possible to support them to decarbonise their operations and reduce their impact on the climate.

As generators of wealth and providers of jobs and skills, the borough's prosperity is dependent upon our businesses flourishing. Climate change presents several threats to businesses, and those that are unable or unwilling to respond appropriately, risk falling behind other businesses which choose to respond and adapt their operating models.

How to reduce emissions

There are a wide range of measures that need to be taken by Sandwell's businesses, and this reflects the varied nature of the goods and services our businesses provide.

Businesses whose operating models rely on high carbon production methods need to transition to low carbon approaches. Those with connections to fossil fuel industries also need to consider adapting their operations to reflect the transition to renewable sources of energy.

Businesses also need to adopt models which are compatible with a ‘circular economy’, which means materials stay in circulation for longer, reducing the need for disposal, as well as the emissions associated with producing raw materials. Sandwell already has some good examples of companies which make use of waste materials to produce new products.

What we need to do

We need to understand what local businesses are already doing to address climate change, e.g. updating their equipment, sharing logistics operations or using the local supply chain.

Businesses will need to be supported in accessing funding which can cover costs associated with insulating their premises or transitioning their fleet to EV.

Establishing a ‘Green Business Network’ enables existing businesses to showcase their low-carbon approaches and an award scheme would give them recognition and publicity, as well as encouraging peer to peer support.

A programme of training targeted at businesses to help them understand how to decarbonise is needed, along with the necessary support enabling them to develop viable plans to decarbonise their operations.

To enable businesses to develop plans to decarbonise or to adopt a ‘circular economy’ approach, we need to understand where this support will come from and assess our own ability to provide it. We should look at other local authority areas and understand the most successful models for providing the relevant business support for decarbonising.

Who is responsible

Regeneration & Growth Service Manager / Regeneration Manager

Timescale

The timescale to support businesses to decarbonise is dependent upon sufficient resources being available to work with businesses; the availability of funding and the willingness of businesses to engage on this agenda.

It may be possible to set up a Sandwell Green Business Network in this financial year.

Emissions from businesses need to have reached net zero by 2041

Reducing emissions from household waste

As the household waste collection service is not operated directly by the council, its emissions fall into the borough’s 2041 target, rather than our own 2030 target.

Reducing emissions from the collections of household waste is likely to be one of our biggest challenges due to issues of technology and finance. To replace the vehicles used

(RCVs) for collections with those that run on electricity, would be around double the cost of those that use diesel. Electric RCVs are also still in their infancy which is why their cost is so high. Replacement of Serco's fleet of around 60 RCVs is therefore going to take several years and may not be complete until around 2027/2028.

How to reduce emissions

- investigate alternative fuels that have lower emissions
- improve driving efficiency, supported by monitoring and training
- look to electrify parts of the fleet where funding/technology permits
- review energy usage across the SERCO site and implement energy saving behaviours.

What we need to do

If we are unable to reduce the emissions fast enough from Serco's fleet, then an alternative is review how we deploy the RCVs with one option being to reduce the frequency that their diesel vehicles are used. This would impact positively on the borough's air quality; improve the local environment through reduced noise of diesel vehicles and reduce the amount of congestion on our roads, which in turn supports air quality and our businesses.

Who is responsible

Waste & Fleet Service Manager

Timescale – emissions from household waste need to be at net zero by 2041.

Community Engagement

Meeting our 2041 target is dependent upon the actions of a range of partners and organisations, but the behaviour of our residents will also have a significant role. We know that changing public behaviour is one of the largest challenges for public organisations, so it is essential that we develop an effective approach to community engagement. This approach should ensure we 'leave no one behind' in our climate change work and help us to engage with all of our communities.

How to reduce emissions

The every-day and longer-term behaviour of residents impacts upon the borough's emissions. By persuading residents to change their behaviour towards more climate friendly activities, we can build momentum and create a consensus around behaviour that supports meeting our 2041 target.

What we need to do

We already have a 'road map' which sets out the principles of how to move forward with our community engagement work around climate change and this can serve as the starting point for developing a strategic approach in this area.

We need to work with our residents, explaining the risks associated with climate change and the urgency of action. We must develop a sophisticated and compelling range of messages

that we can communicate with our diverse communities. We need to talk to and find out more from our residents about how they want to be involved and how best to communicate with them

Resources will be needed for us to be taking a more proactive and interventionist approach to community engagement, building on existing links with our communities and establishing projects that enable residents to become actively engaged.

Several authorities have set up community networks, such as Decorum Borough Council, as a way to encourage participation in climate change discussions and of taking local climate action.

Our on-line presence around climate change should be enhanced so that we are providing information about what we as a council are doing, as well as giving information about what residents, community group and businesses can do.

Building on our strategic approach to community engagement, we also need to develop a Communications Strategy, taking into account not only varied ways to send out messages, but the need to adapt them to suit different audiences.

Who is responsible

Climate Change Programme Team

Timescale – community engagement supports the borough’s 2041 net zero target

Energy

How to reduce emissions

The generation of energy to provide heat and power to our homes, businesses and other buildings is a large source of emissions in Sandwell. We are already exploring two options to create ‘heat networks’ and if adopted, these could lay the foundations for further development of ‘heat networks’.

Although the National Grid has been decarbonising electricity generation in recent years, we cannot rely on this process alone to reach net zero in Sandwell.

The graph below shows just how much gas we use in the UK, mainly for space heating, and therefore the challenge involved in replacing that gas with other forms of energy. We need to significantly increase the amount of energy we generate from electricity, as so much of our heat comes from gas.

Yearly Gas and Electricity demand

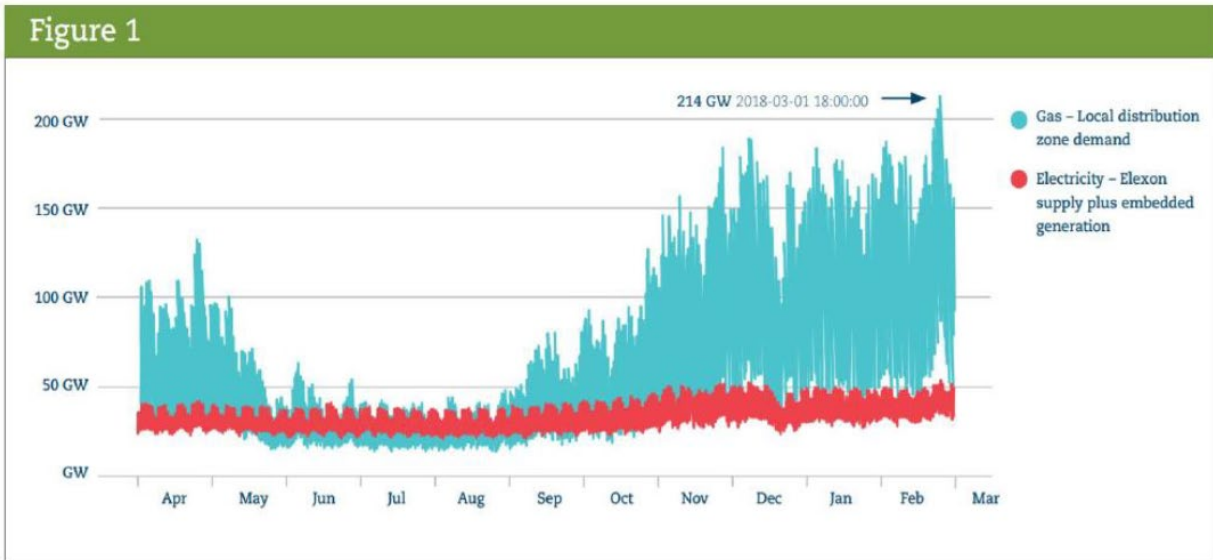


Figure 1: Britain's hourly local gas demand and electrical system supply, 2nd April 2017 - 6th March 2018.

In Sandwell there are untapped resources which *may* be able to provide sources of heat to serve heat networks:

- The canal network
- Underground aquifers
- Using ground-source heat pumps
- Heat recovery from industrial processes
- Flood water from abandoned mines
- Heat recovery from sewerage

Solar PV in Sandwell is still in its infancy, and the vast array of buildings in the borough provide potential opportunity for the installation of roof-mounted arrays:

- SMBC Corporate Buildings
- Schools
- Council Housing Stock
- Commercial and industrial businesses
- Utility Companies
- Other public sector e.g. NHS
- Partner organisations

What we need to do

It is expected that the Detailed Project Development stage of the two planned heat networks will conclude in June 2022. At that point, the council will need to decide whether and how it wants to proceed.

In the meantime, we need to assess the other sources of energy available in Sandwell and consider issues such as feasibility and scalability. We may wish to consider a study of potential opportunities for Solar PV on:

- council stock
- schools stock
- any leased buildings
- council houses.

Previously, officers have looked into the possibility of installing a wind turbine in Sandwell and this option should also be considered as part of the range of measures needed for local energy generation.

Who is responsible

Strategic Assets and Land Interim Service Manager / Regeneration & Growth Service Manager

Timescale – provision of energy across the borough sits in the 2041 target for net zero

Off-setting

In the context of this Action Plan, off-setting means absorbing any carbon emissions which we are not able to eliminate

What we need to do

It is important to state that our first priority should always be to reduce emissions as far as possible. Where we are unable to do this, e.g. due to limiting factors of a particular building or industrial process, then we must look to off-set those emissions.

In Sandwell, we have an ‘asset’ of natural capital which is already absorbing carbon emissions, e.g. our plants, trees and soils in parks and nature areas. This asset should be protected and enhanced.

Where feasible, we need to expand our natural capital, through additional tree planting, creating new green spaces and finding creative ways to introduce vegetation and soft landscaping into urban areas, such as green roofs and sustainable urban drainage systems (SUDS).

How we do this

A borough-wide study exploring the opportunities for introducing more natural capital will help us to establish to what extent we can off-set in Sandwell. It is very likely however, that we will be unable to plant enough trees in Sandwell to off-set at the speed and extent required to reach our net zero targets. We will therefore need to look outside of Sandwell and explore additional opportunities for tree planting or habitat restoration, either with neighbouring authorities or further afield.

We need to take a strategic approach to our existing natural capital, to maximise opportunities for its protection and to ensure consistency in how it is managed and expanded.

Through our planning processes, we should seek to introduce as much green infrastructure as is possible into new developments. We should also look to enhance existing developments with green infrastructure, e.g. replacing hard landscaping with soft landscaping.

Who is responsible

Parks & Grounds Interim Service Manager

Timescale – off setting supports both the 2030 and 2041 net zero targets

Adapting to the impacts of climate change

The most vulnerable members of society are those can least afford to adapt to a changing climate. We are also aware of how a changing climate will make life harder for many of our residents whilst also presenting significant challenges for our businesses.

We know that the earth's temperature has already risen by around 1.2 degrees and that it's likely to rise to at least 2.4 degrees, so we need to know how this 'locked-in' climate change will affect people's health, their homes, our infrastructure and our public services.

Heat waves, including sustained periods of high internal temperatures (inside buildings), have the highest impact on the young, the elderly and the sick – in other words, those groups of people most likely to be in their homes during the day. It is thought that the over 65's are the most at risk, and as the UK's population ages, this will become an even larger demographic.

Whilst retrofitting homes to make them more energy efficient is vital to reduce their carbon footprint, this can also make homes more prone to overheating. There is a danger that well-insulated homes that require less heat, will instead start to increase their demand for energy through cooling, provided by air-conditioning machines.

Other buildings are also at risk of overheating, including schools, hospitals, offices, factories, leisure facilities, public buildings and other places of work.

Part of Sandwell adapting to a changing climate is ensuring that all aspects of daily life can continue, so we need to support all of these sectors in adapting their buildings to cope with heat.

What we need to do

To support the borough's residents, communities and businesses in adapting to a more unstable climate, we need to understand better how they will be impacted, so that we can work together to minimise these effects and increase the resilience of the borough. We may want to understand the difference between what a 1.5 and 2.4 degree rise in the earth's temperature will mean for Sandwell. Armed with this knowledge, we will be in a much stronger position to target the support needed, e.g. to vulnerable residents living in poorly ventilated apartments. This information would also help us to plan investment in our infrastructure, so that it is able to withstand the inevitable impacts of climate change. There will be costs associated with this investment, but they will be even higher if we do not prepare for the impacts of a changing climate.

Tree planting (as discussed elsewhere below is also part of our response).

Who is responsible

Emergency Planning Manager / Deputy Director Public Health

Timescale – this fits into our 2041 net zero target although there is level of urgency due to the impacts that some locked-in elements of climate change will have on our residents.

Air Quality

Air quality is an important issue in Sandwell affecting the health of many of our residents. Tackling this issue however, has many benefits, not only to public health but also to climate change. For example, reducing the number of journeys made by car can lead to improvements in air quality, to physical well-being, as well as supporting the move towards net zero.

Sandwell MBC has an Air Quality Action Plan, produced and being led by officers from Public Health, who work closely with the Climate Change Programme Team.

What we need to do

- Promote car sharing among residents and businesses in the area
- Ensure air quality considerations are included in the new Local Development Planning Framework and ensure policies seek to reduce the need to travel and promote the use of modes other than the car
- Implement Black Country Low Emission Strategy
- Provide guidance in relation to air quality for developers when submitting planning applications
- Review SMBC vehicle profile and formulate strategy for improvements reducing emissions
- Reduce fine particulate matter (PM_{2.5}) from domestic burning by declaring the whole of Sandwell a Smoke Control Area

- Educational campaigns on air pollution, including its causes, impacts, how to avoid it and how to help improve it.
- Engage with local communities to encourage community driven behavioural changes that will have a positive impact on local air quality
- Apply for and utilise additional funding resources that support our ambition to improve local air quality
- Increase public awareness of air quality across Sandwell through the provision of real-time air quality monitoring data
- Review and implement of electric charging and other low emission refuelling options for SMBC vehicles
- Review taxi & PHV fleet licenced by SMBC (including fleet make-up, age and emission profiles)
- Determine the most effective ways to influence and improve low and ultra-low emission vehicle use in taxi fleet.
- Engage with council employees to promote low and ultra-low emission vehicle technologies
- Promote car club/pool vehicles and sustainable modes of travel to reduce use of SMBC employees' vehicles
- Improve branding to increase attractiveness of public transport
- Improve access to information regarding transport options
- Promotion of walking and cycling
- Encourage travel plans for employers, schools & hospitals
- Provide air quality information and promote sustainable transport in schools

Who is responsible

Deputy Director Public Health

Timescale

The above actions are in the 2020-2025 AQAP

Natural Environment

The natural environment in Sandwell is our biggest, but unquantified, asset in the fight against climate change. Without our parks, nature areas, street trees and other areas, we would have to invest substantially larger sums to help Sandwell cope with the impacts of climate change. It also helps to improve air quality and residents' local environment, through making neighbourhoods greener and more attractive to live, play and work.

The UK is one of the most nature depleted countries in the G7, yet the pandemic has demonstrated clearly that people value nature and actively seek it out for the physical and mental well-being. Whilst parts of the borough are well served by green space, many residents have very limited access to a local site

We won't get to absolute zero emissions in Sandwell and this is recognised in our two corporate targets of reaching carbon 'net zero' which means we balance the emissions we emit, with those we can absorb (also known as off-setting). Our best chance of being able to

off-set our residual emissions, will be through tree planting, as well of protecting our existing tree stock.

What we need to do

We need to embark on a large-scale tree planting scheme across the whole borough so that residents in every neighbourhood can benefit from living in a green environment. Tree planting is only part of the solution however as we need to maximise the opportunities for absorbing carbon. The more vegetation and natural areas we develop in Sandwell, the more we are helping to keep the borough cool, which is critical in protecting our residents as the climate warms and we experience longer and hotter heat waves.

A Tree Strategy is being developed which needs to have the protection of existing trees at its core along with the ambition of increasing the extent of tree cover in the borough. A clear Tree Strategy that makes clear the importance of the borough's trees will also support members in dealing with requests from residents to remove healthy trees.

We need to understand how close as a borough and as an organisation we may get to net zero and then assess the amount of tree planting required and compare that with the available land.

Who is responsible

Parks & Grounds Interim Service Manager

Timescale

The Tree Strategy will be produced in 2022, out of which will ultimately emerge a borough-wide plan for increasing tree cover in Sandwell, which can continue from 2023 through to 2041 and beyond.

Strategic Partnership

Sandwell MBC contributes around 1 - 1.5% of the borough's emissions, so whilst we are able to reduce these emissions, this still leaves 98% of the borough's emissions where our role is less influential.

In line with many other local authorities, we need to build a strong partnership of influential organisations from across different sectors within the borough, who together can initiative action which helps to drive down emissions.

A report has recently been commissioned which examines the approaches taken by several other local authorities, and which will report back on areas of success as well as making recommendations for how Sandwell MBC could create and sustain a partnership.

What we need to do

Once we have examined the report, we will make recommendations about how to proceed and how to resource the creation of a partnership.

Who is responsible

Regeneration & Growth Director / Climate Change Programme Team

Timescale

The partnership could be established by the end of 2023.

Resources

In the next few years, the Climate Change Programme is going to develop into a major work stream for the council. Clearly this is will have implications for our resources, and we will need to identify where there are gaps and consider the options available.

During 2022, we will identify the gaps we have in our climate change provision and then co-ordinate an evidence-based submission for addressing this in financial year 2023-2024.

We know from previous analysis of resources to support climate change, that there are capacity issues in:

- Transport Planning
- Highways
- Business Growth
- Corporate Energy
- Borough-wide energy
- Natural Capital
- Community engagement and communications – crucial for behavioural change

Financing Sandwell's Climate Change Activities

There are several finance options available to the council for funding climate activities. Green Finance is a growing area that we should consider and which opportunities to encourage external investment into Sandwell. Finance options include:

- HRA
- [Energie Sprong](#)
- Public Works Loan Board
- Community Municipal Bonds
- Public Sector Decarbonisation Scheme
- Public Sector Demonstrator Fund
- UK Shared Prosperity Fund
- City Region Sustainable Transport Settlement
- WMCA
- Private Investment, e.g. to fund heat networks and home retrofits.
- Parking Levy to raise funds for transport improvements.
- Congestion Charge to raise funds for transport improvements

Governance

A Programme Board

A new set of arrangements are proposed that will provide clear lines of responsibility and accountability for the role of climate change activities for both members and officers (see Appendix 1). These will ensure that we get an integrated approach to climate change, so that key figures are all aware of the importance and scope of their roles, as well as the impact on other areas, e.g. green infrastructure supports improving air quality, as well as mental/physical health and the borough's resilience to climate change. Equally, this will help to ensure the work of one department doesn't impact negatively upon the objectives of another, for example reducing the number of car journeys will reduce income streams from car parking charges.

There will be a director-led Programme Board, chaired by the Director for Regeneration and Growth, which will serve as the officer group to implement the Climate Change Strategy. Each Directorate will nominate a minimum of one Service Manager to attend and who will act as the accountable officer for a specific set of actions from the Climate Change Strategy. Service Managers will integrate these actions into their Business Plans, helping to ensure that addressing climate change becomes an integral part of council activities. They will also report into the Programme Board.

Programme Board will report quarterly into the Members Steering Group and annually to the Cabinet.

The Programme Board will be supported by the Climate Change Programme Team, whose role will involve providing technical advice, guidance, reporting and monitoring of activities in Service Areas. It will be accountable to the Members Steering Group and will provide it with performance and progress updates. Where financial decisions are needed, the Programme Board will additionally report to the Cabinet.

The Members Steering Group

The Members Steering Group will continue to be chaired by the portfolio holder for climate change and made up of cross-party representation, to ensure maximum political support for the climate change agenda (see Appendix 2). This will include the Cabinet Advisor for Clean and Green.

Conclusion

Tackling climate change in Sandwell will be both challenging, complex and take many years to deliver, with climate change affecting all areas of the borough and because our greenhouse gas emissions are continuing to rise annually when they actually need to be falling each year.

We will need to work closely with our residents, develop effective internal ways of working, build strong external partnerships and identify appropriate resources. Dealing with climate change will clearly impact upon council finances, and while we can expect more central

government support to become available, we will also need to examine and utilise a range of other sources of finance.

There are however, many co-benefits to the borough in tackling climate change which align with our own corporate objectives around poverty, opportunities, place, jobs, skills, investment and regeneration.

Appendix 1

Governance Arrangements

