MERTON CLIMATE STRATEGY & ACTION PLAN

FOREWORD

As scientists show us that the world is warming faster and the effects may be worse than originally predicted, there has never been a more pressing time to act on climate change. In July 2019, the Council agreed to work towards net-zero carbon emissions from the Council's operations by 2030, and the borough by 2050. Our public consultation showed that Merton is ready to act, with around 90% of respondents seeking further action by the Council and in their own lives.

The wave of public support did not come as a surprise. Since Merton's first climate strategy in 2009, the Council has already achieved a 40% reduction in carbon emissions[1] and supported numerous climate friendly policies and projects. Despite all of our past efforts, we need a major expansion and acceleration of action to avoid the worst damaging effects of climate change.

During the development of this plan, we have experienced the beginnings of the unprecedented impacts of the Covid-19 global pandemic. Many people in Merton have suffered from the effects of the virus, the necessary changes needed to slow its spread, and the immediate economic aftershock. We have yet to fully comprehend what the lasting effects will be.

If there is to be any silver lining to the Covid cloud, it is that the impacts of the pandemic will result in the largest ever annual fall in greenhouse gas emissions[2] And the local effects are tangible: cleaner air, lower levels of traffic and less waste. We have also seen an uplifting community support network all working towards the same goal. It demonstrates that strong action taken as a whole community can make a tangible difference to tackling climate change. As we work together to recover from the crisis, we are seeking to harness and build upon these environmental and community benefits.

The Covid-19 outbreak also serves to remind us that circumstances are ever-changing and a long-term plan must be responsive and adapt over time. The success of this plan is dependent on three major factors, and the extent to which they can be realised is uncertain. Firstly, National Government must provide the right policy framework. Secondly, sufficient funding to support the actions is needed, which is particularly poignant as the Covid crisis has put extra strain on existing budgets and major funding gaps at national level still remain. Thirdly, everyone in Merton must form part of the solution.

I want to thank the many partners that have helped develop the plan including Merton's Climate Emergency Working Group, Aether and a wide range of individuals and groups across Merton, London and beyond. I hope this is only the beginning. As we turn the plan into action we want participation to spread and grow into every corner of Merton to reduce nearly 0.7 million tonnes of carbon emissions each year.

Cllr Tobin Byers: Cabinet Member for Adult Social Care, Health and the Environment

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19% of borough emissions — Transport

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INTRODUCTION

About this document

This document sets out Merton's strategic approach to reducing carbon emissions that arise from activities occurring in the borough, and identifies a set of high level actions that are required to become a carbon neutral Council by 2030 and borough by 2050. It contains the following sections:

About the terms, targets, actions and costs: explains the main terms used throughout the report, the scope of the targets, and how actions and costs have been formed.

Merton's carbon emissions: shows our current understanding of all major sources of emissions in Merton; an important first step to understanding the scale of the challenge and how we can work towards achieving the targets.

A Vision for Merton: depicts what we want Merton to be like once the targets have been met, based on the major transformations required to the economy, buildings, energy, transport and green spaces.

A Strategy to Combat Climate Change: sets out how we will collectively focus our efforts and resources to bring about the actions that need to happen to tackle emissions and guard against the effects of climate change.

Action plan: sets out major actions in all sectors that are needed to meet the 2050 and 2030 targets.

Costs: provides a high-level estimate of the main additional investment costs and potential savings associated with delivering the actions.

Measuring Success and Next Steps: shows how, if actions across all sections are completed the net-zero targets can be achieved.

Terms used in this document

For the purposes of this document "carbon emissions" or "emissions" refer to all greenhouse gaseswhich cause global warming, for which carbon dioxide is the most significant. Air pollution emissions such as particulates or oxides of nitrogen which cause harm to human health are subject to a separate action plan already underway.[3]

"Carbon neutral" or "net-zero" describe where the overall balance of carbon emissions going into the atmosphere is zero. This means that any carbon emissions produced inside Merton are offset elsewhere, for example through supporting additional renewable energy generation outside the borough.

About the targets

In July 2019, Merton Council committed to working towards two carbon reduction targets. The first is to produce net-zero emissions in the borough by 2050. Meeting this target is consistent with current national legislation[4] and the Mayor of London's climate action plan,[5] but our aim will be to achieve the target sooner if possible. The second a more ambitious target to achieve net-zero emissions across the Council's buildings and services by 2030. Both targets are extremely challenging.

To better understand the carbon emissions in Merton, the pace of change needed to meet the targets, and how to track progress, technical support was commissioned. Merton's emissions inventory and decarbonisation pathways model[6] provide the main evidence for the action plan.

Carbon targets are based on measurable emissions, but the actions set out in the plan have a much wider scope. Many carbon plans only estimate and seek to reduce "direct" emissions such as the use of gas, petrol and diesel, and the emissions associated with producing electricity, which can be tracked using national data. Many ignore emissions from the consumption of goods and services.[7] The action plan seeks to address all major sources of emissions that Merton can influence and has includes actions which help Merton to reduce the impact of a change in climate.

Whilst the focus is firmly on reducing emissions as far as possible, producing no carbon emissions whatsoever would be technically unfeasible or extremely expensive. So the target is "net-zero" to allow some emissions to be offset if necessary.

About the actions

The actions are designed to deliver the major transitions needed to make Merton a carbon neutral borough by 2050. They are limited to those which are technically possible and within the control of the Council or Merton's organisations, businesses and residents.[8] The Council has an important part to play in enabling many actions to 2050, but in most cases, the change must lie with others. The plan identifies where individuals, businesses, organisations, landlords, service providers and communities play a key role. It also sets out how the Council intends to become carbon neutral by 2030.

The action plan will be regularly reviewed to reflect the fact that climate change is a fast moving area where new legislation, technologies and initiatives are rapidly evolving. To ensure that the plan is responsive to change, a delivery plan is being developed alongside this document to track progress and measure success of each action in more detail.

About the costs

Actions which will result in decarbonising Merton's buildings, transport and energy supply require huge financial investment. These investment costs have been estimated, but are likely to change over time with the advent of new technologies and changing market forces. At this stage it is unclear who will pay. Some of these investment costs will fall to the Council, but many will require additional investment from National Government, businesses and members of the public. Without this investment, the costs of dealing with climate change impacts in a world with average temperatures 2 degrees or more above pre-industrial levels will be far higher.

All actions necessary to achieve our net-zero targets have been set out in the plan, even if we do not yet know how they will be funded. It is important to note that actions which fall to the Council can only be taken forward if they are within our financial means. This means that currently, many of the actions needed to meet the targets are aspirational. Those that require additional funding are marked on the plan with the symbol "£".

Merton Carbon Emissions

Borough Emissions

Economy: Carbon emissions are generated as products are made and transported for Merton's consumers, and also as products are disposed of. Estimates are uncertain, but those likely to have the most significant impact include construction materials, food production, vehicle manufacture, clothing, electronics, appliances and aviation.
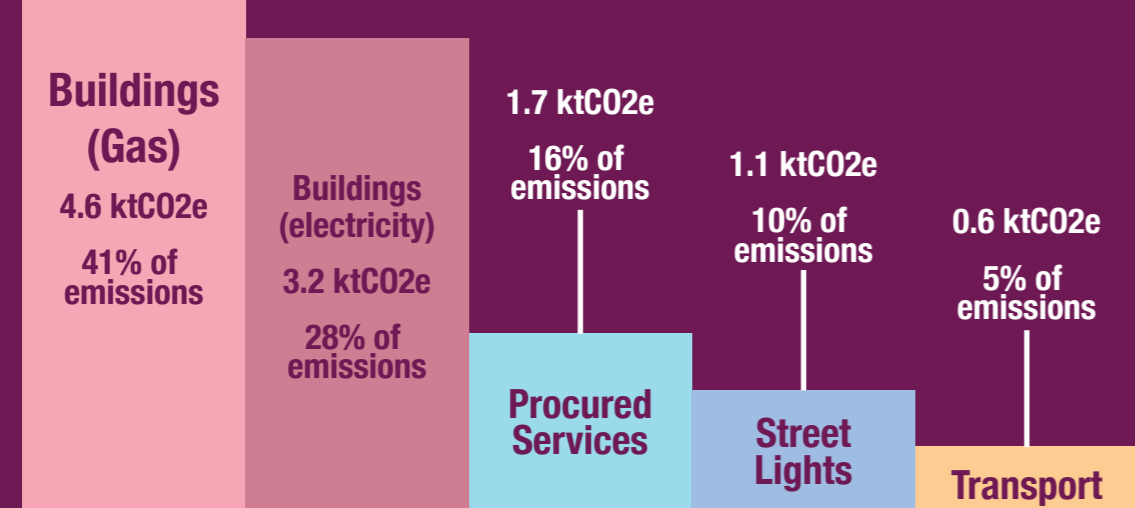
Buildings: Emissions that are generated from Merton's building come mainly from the use of gas heating, cooking and the use of electrical lighting and appliances. The production of local renewable electicity avoids the need to use grid electricity which has a higher carbon intensity.

Transport: Petrol and diesel cars and other road vehicles make up the vast majority of transport emissions.

Land use: Land serves as a store of carbon as growing plants absorb carbon dioxide from the air, and can therefore offset emissions elsewhere.

Council Emissions

11.1 ktCO2e in total, accounting for 2% of borough emissions

PRODUCTS

Buildings (Gas)
4.6 ktCO2e
41% of emissions

Buildings (electricity)
3.2 ktCO2e
28% of emissions

1.7 ktCO2e
16% of emissions
Procured Services

1.1 ktCO2e
10% of emissions
Street Lights

0.6 ktCO2e
5% of emissions
Transport

Borough Emissions

708 ktCO2e in total

Economy

Emissions from the wider economy cannot be calculated accurately but they are estimated to far exceed the emissions generated within the borough.

0.2%
of building emissions avoided by local renewable energy generation

LOCAL STORE

Residential buildings
328 ktCO2e
46% emissions

Commercial buildings
243 ktCO2e
34% emissions

Transport
138 ktCO2e
19% emissions

Land Use
0.1% emissions offset

Council Emissions

Energy used in the Council's buildings, street lighting and transport fleet make up the majority of emissions. Emissions from procured services are likely to be higher than estimated, as this represents a limited sub-set of procured services.

A VISION FOR MERTON

Green Economy

Merton will have a thriving green and circular economy, with businesses providing accessible low carbon services and offering sustainable, local and healthy products. Individuals and companies will consider the environmental impacts of what they buy and sell due to increased environmental awareness. People will re-use, repair and share products, avoiding unnecessary packaging and single-use plastics, so very little waste will be generated in Merton. Any remaining waste streams will be re-used or recycled where possible.

Buildings & Energy

Residents and businesses will have much lower energy bills because homes will be more energy efficient and will store and generate low carbon energy. Natural gas heating will be replaced by low carbon alternatives. All new developments will be net-zero carbon, sustainable and adapted to the effects of climate change.

Green Merton

The borough will have more trees and vegetation to enjoy. Town centres and residential areas will be cooler, less prone to flooding and have cleaner air. Communities will have more ownership of public green spaces and have an improved wellbeing.

Transport

People will be healthier as a result of more active travel and cleaner air. Walking and cycling will be accessible to all and be the default choice for most local journeys. Fewer people will own cars and all vehicles will be electric or use other low carbon fuels. Many neighbourhoods and town centres will be car free. Public transport will be clean and provide an excellent and accessible service.

Council

The Council will provide excellent quality net-zero carbon services in Merton. Council-run buildings and transport will be efficient and use carbon neutral energy. Service providers will undertake net-zero carbon activities for Merton. All Council staff will be making sustainable choices in their travel and workplace.

A STRATEGY TO COMBAT CLIMATE CHANGE

Leading by example

Merton Council intends to play a pivotal role in increasing Merton's ability to decarbonise. By setting a 2030 net-zero carbon target, the Council can demonstrate leadership and ambition where it has most control. In addition, the Council is in a unique position to partner with major providers such as Transport for London (TfL), the National Health Service (NHS), schools, social housing providers and energy network operators to develop joint climate ambitions to deliver low carbon services in the borough. Through effective communication the Council will endeavour to facilitate and empower individual and community action in areas that are beyond the normal reach of the Council, such as the consumption of goods, recycling and re-use, reducing car use, tree planting on private land or community energy.

Making a strong case for change

Merton cannot achieve our climate ambition in isolation. Actions at an international, national, regional and individual level all have a bearing on Merton's ability to combat and adapt to climate change. A lack fo funding or national policy can hinder large-scale transformational change to roads, energy supply and buildings. Many actions are dependent on changes in people's attitudes and behaviours towards more sustainable lifestyles. Some actions require new technology to become more widespread and accessible. Some actions require the introduction of new skills in the local economy, such as tradespeople being trained to install low carbon appliances.

As the plan has developed, the gaps in funding, policies and actions from others have become ever clearer. On behalf of the residents and businesses in Merton we will lobby for funding and faster change that enables the major investments to be made and for low carbon activities to become the default choice.

Prioritising major transformations

The Council must ensure that our efforts to reduce emissions do not undermine the essential services that the Council provides in supporting the young and the vulnerable; to maintain safety and ensure the upkeep of public spaces. In order to make sure that limited resources are focused where they can have most impact, the action plan is focused on the major transformations which need to happen in Merton that are likely to make the most significant impact on reducing carbon emissions.

The three transformations that form key pillars of the action plan are:

> A change towards a green economy; facilitating the supply and purchasing of more sustainable products and services with less waste.

> A shift to low carbon buildings and energy, by improving energy efficiency, replacing gas heating with low carbon alternatives (e.g.heat pumps), and increasing local renewable electricity generation.

> A transition in transport in favour of walking, cycling and public transport, and a replacement of the remaining vehicle stock to low carbon alternatives where powered vehicles are needed.

Merton's high population and suburban environment serves to limit the extent to which planting more trees can reduce greenhouse gas emissions within the borough. Despite its limited potential in locking up carbon, greening Merton has a role to play in adapting to the effects of climate change. Strategic tree cover can provide shade to guard against more prolonged and intense spells of hot weather, manage the increased risk of local flooding by providing sustainable drainage and increase the resilience of biodiversity by creating and preserving habitats.

Designing with climate in mind

Actions to reduce climate impacts are likely to be cheaper and more successful if they are taken into account from the outset. The Council is therefore seeking to embed thinking on climate change in all parts of the Council. This includes ensuring that the impacts of climate change have been taken into account in all policies, programmes and strategies; and that efficiencies in Council services have been maximised to reduce carbon emissions.

We are also considering how planning and planning policies can support a shift to low carbon activity and adapt to a change in climate. Key areas of focus include low emission regeneration, provision of appropriate infrastructure to accommodate a change in energy generation and transportation, changes in public spaces and building design to prevent overheating, minimise energy use and emissions, and reduce water use, and use of sustainable drainage solutions to help prevent flooding.

Reaping the benefits for all

Many actions have benefits which go beyond emissions reduction. Where this is the case we are seeking to maximise the co-benefits. Many actions in the plan go hand in hand with making the borough a more pleasant place to live, by reducing waste, improving air quality and providing public spaces which are more people-focused, greener and more biodiverse.

There is also a major opportunity to help support community cohesion and wellbeing, which is particularly important as we seek to recover from the worst effects of the Covid-19 pandemic. Actions have the potential to improve health and wellbeing, increase social inclusion and reduce poverty. We also want to prevent the vulnerable from being disproportionately affected by the impacts of climate change, or being exposed to the high costs of reducing emissions.

To best achieve this, we want the public to have a greater role in deciding how climate actions are prioritised and carried out, giving rise to our intention to set up an implementation group to support the delivery of this plan.

Measurable success

The climate action plan is based on our understanding of the best available evidence. Our collective understanding of this complex area is changing fast. Many innovative ideas that could offer major solutions are being trialled. So whilst the high-level actions are unlikely to change greatly, the delivery of the actions will. To ensure that the action plan continues to identify and prioritise the most cost-effective approaches, a delivery plan will serve to track detailed actions and be adapted on a regular basis to ensure the plan continues to respond to new circumstances. An agile delivery plan requires careful monitoring. As well as regularly updating the greenhouse gas inventories, we will track major actions with measurable outcomes where possible, and regularly report on progress through updates on Merton's climate change website.[9]

GREEN ECONOMY

This section considers actions which reduce emissions from the things we buy and sell by changing what we eat, how we use products and services, and how we avoid waste through prevention, recycling and re-use. Carbon emissions generated from the production and transportation of goods and services consumed by Merton's residents cannot be accurately estimated or tracked, but are likely to far exceed Merton's other sources of emissions.[10]

Vision for the Green Economy:

Merton will have a thriving green and circular economy, with businesses providing accessible low carbon services and offering sustainable, local and healthy products. Individuals and companies will consider the environmental impact of what they buy and sell due to increased climate awareness. People will re-use, repair and share products, avoiding unnecessary packaging and single-use plastics, so very little waste will be generated in Merton. Any remaining waste streams will be re-used or recycled where possible.

ACTIONS...
...for individuals, businesses and organisations

By 2050, individuals must reduce their carbon footprint to near zero through lifestyle and product choices and by influencing others.

Emissions associated with food, clothing and textiles, construction, electronics, aviation and the manufacture of private vehicles are likely to have the greatest carbon impact. Individuals should choose products and services which are low carbon and sustainable. For example, moving from a high-meat to a reduced-meat diet[11] can reduce your dietary emissions by 35%,[12] and is often healthier and cheaper.

Eating seasonally and locally helps reduce the emissions associated with the production and transportation of food respectively. Choosing biodegradable products and investing in ethical companies helps to support a low carbon and green economy.

Individuals, businesses and organisations should prevent waste where possible to achieve a 75% reduction in waste by 2050;[13] waste prevention saves more carbon than recycling. Food waste can cause high emissions unless it is recycled appropriately, and on average results in consumers spending 14% more on their weekly shop. Plastics have a high carbon impact so choosing reusable items and avoiding single-use plastics is better. Textiles have a high carbon impact, so reducing the number of new clothing items bought every year could achieve a 66% reduction in emissions from the clothing industry.[14]

ACTIONS...

...for businesses and organisations

By 2050, businesses and organisations must help to build a low carbon economy in Merton, by: working to reduce supply chain emissions and provide local, sustainable and healthy products whilst minimising waste; and avoiding investment in or procuring companies which produce high emissions.

Businesses and organisations should undertake an environmental audit,[15] or sign up to a sustainability charter or certification scheme and provide information on the carbon footprint of their products and services to customers.

Businesses and organisations should encourage low carbon behaviour in their staff and clients.

Case Study

Young residents in Merton have spoken out about the need to take action in addressing climate change. In 2019, a local young resident launched the 'SwopItUp' initiative, a programme run by teenagers and for teenagers which enables clothes swaps in schools to encourage people to use second-hand clothes instead of buying new products, and to reduce waste. In response to the Covid-19 lockdown, SwopItUp have launched a Creator's programme and the #SwopItUpClub for young people aged 11 - 18 to get involved in online environmental action associated with the programme.This scheme showcases how individuals can take steps to reduce their carbon footprint, promote a circular economy and work towards Merton's ambition of becoming net zero carbon by 2050.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

As plans are developed to manage the long-term effects of Covid-19, the Council and organisations will support actions which maximise opportunities for a green recovery.
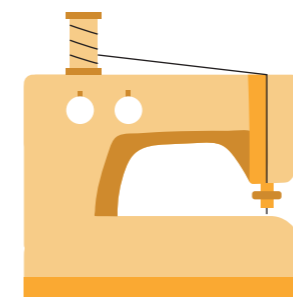
The Council and organisations will promote a circular and low carbon economy by raising awareness on and encouraging sustainable consumption, waste reduction and recycling, and green finance to 2050.

By 2023, the Council will consider mechanisms to help address the skills gap in the low carbon economy in Merton. Priority areas will likely include skills required to deliver domestic retrofit at scale and repair skills to promote the circular economy.

The Council will support commercial and community efforts to promote a low carbon economy through local projects which encourage sustainable consumption, waste reduction and low carbon lifestyles to 2050.

By 2023, the Council will consider financial and other mechanisms to incentivise low carbon performance in local businesses.

By 2021, the Council will review on-street waste infrastructure across Merton and develop a strategy to encourage residents and businesses to recycle and reduce waste.

By 2023, the Council will promote a green and circular economy in Merton through strategic planning documents such as the Local Plan and Wimbledon Masterplan.

£ The Council will promote a green and circular economy through major regeneration projects such as the Morden town centre regeneration to 2050.

BUILDINGS & ENERGY

Energy used to heat and power buildings in the borough makes up around 81% of carbon emissions in Merton's greenhouse gas inventory. The amount of energy consumed is influenced by the efficiency of our building stock. Well under of the 88,000 homes[16] are not yet efficient enough to make the necessary move away from natural gas central heating to low carbon alternatives. Electricity and gas used in non-residential buildings make up around 34% of emissions. Solar PV currently on Merton's roofs replace grid electricity with electricity which is nearly zero-carbon; reducing energy emissions by 0.2%.

Vision for buildings and energy:

Residents and businesses will have much lower energy bills because homes will be more energy efficient and will store and generate low carbon energy. Natural gas heating will be replaced with a low carbon alternative. All new developments will be net-zero carbon, sustainable and adapted to the effects of climate change.

ACTIONS...
...for organisations, businesses and landlords

Merton's businesses, organisations and landlords must, if possible, invest in measures to reduce energy use, replace fossil fuel heating with a low carbon alternative such as heat pumps, and maximise renewable energy generation.

Businesses, organisations and landlords should actively monitor energy use and, if feasible, consider installing energy management systems and support staff to reduce emissions from home working.

ACTIONS...
...for home owners and landlords

47% of homes in Merton are rented and 53% are owned. By 2050 all homes must be highly energy efficient to reduce the amount of energy used. In practice this means moving from an average EPC rating of D to A[17], mainly by investing in loft, wall and floor insulation and replacing doors and windows. Investments should result in significant ongoing energy bill savings.

98% of all homes in Merton have gas heating and are responsible for the largest share of Merton's emissions. By 2050, all homes must replace natural gas central heating and cooking with a low carbon alternative such as heat pumps and electric cookers.[18] Until March 2022, heat pumps may be eligible for 7 years of additional payment through the Renewable Heat Incentive (RHI),[19] or potentially from a proposed Government grant scheme.[20]

By 2050 all homes should maximise the amount of renewable energy generated on-site and energy storage. Solar PV and battery storage on a typical property can reduce energy bills, save several tonnes of carbon emissions and enable the production of around 94GWh per year of local, flexible electricity supply. Using group purchasing schemes such as Solar Together,[21] and the Government's Smart Export Guarantee[22] can help to minimise and pay back intial investment costs.
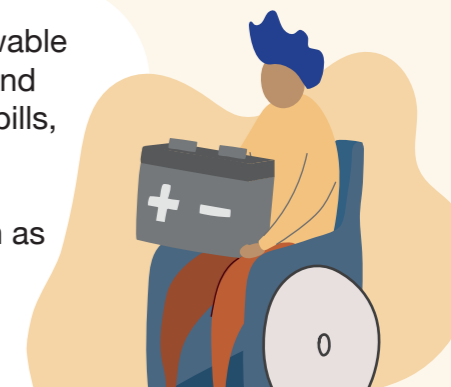
Energy bill payers should consider a switch to a 100% green energy tariff to ensure that their electricity supply is from a renewable source; for which there are very competitive rates on offer.[23]

All occupants should take steps to reduce energy consumption within the home. For a typical home, £150 per year can be saved by reducing the heating by 1C, not overfilling the kettle and switching off appliances. Low cost additions such as draft excluders or reflective radiator panels can save a further £17 per year. For under £100, installing LEDs and a thermostat could save a further £90 a year.[24] Energy efficient appliances, installing smart meters and smart charging will also reduce energy consumption.

ACTIONS...

...for property developers, landlords & individuals planning renovations

By 2025 all new buildings should be capable of operating at net zero carbon emissions[25] if possible to avoid the cost of expensive retrofit in later years,[26] following the principles of the Mayor's energy hierarchy which takes a "fabric first" approach.

All new buildings, developments and renovations should be designed to reduce the effects of climate change, in particular by minimising the risks of overheating and flooding, and minimising water use.

All new buildings, developments and renovations should minimise carbon emissions from construction methods and materials used.

Case Study

A Merton resident, having purchased an Edwardian semi-detached home, found it difficult and expensive to heat and had high energy bills. He added double and triple glazed windows, floor, roof and wall insulation and installed solar PV and solar thermal renewable technology. The real-time data gathered from the PV unit gave him cause to install very efficient appliances and LEDs. These investments have resulted in significant energy bill savings from a 35% reduction in electricity and a 43% reduction in gas use. The renewable technologies provide additional income from electricity sales and a payment from the Government's Renewable Heat Incentive. With a further investment in solar PV he is expecting to become self-sufficient in electricity in the summer months.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

Individuals, businesses, organisations and the Council will lobby for National government to bridge the massive funding gap to support the decarbonisation of buildings and provide clarity on a national strategy to decarbonise heat and buildings.

£ The Council will encourage community energy, individual and business efforts to reduce emissions from buildings, and by 2025, will explore options to overcome the high up-front cost of installing low carbon measures through a loan scheme or energy service company.

Businesses, organisations and landlords to encourage energy efficiency amongst staff and tenants.

£ By 2023, the Council will develop an energy masterplan to support a transformation in energy use.
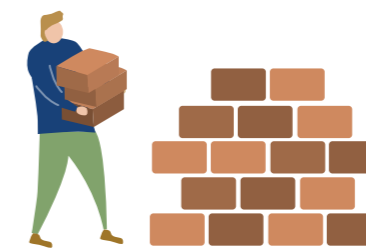
The Council will ensure major Council redevelopments and works are in keeping with net-zero targets to 2050.

£ By 2023, the Council will consider mechanisms to ensure that landlords meet energy efficiency standards and adopt low carbon measures in their buildings to 2050.

By 2021, the Council will review the draft Local Plan policies to promote net-zero carbon development for new buildings, and to maximise energy and carbon savings, reduce embodied carbon, and increase resilience to the effects of climate change for all developments.

TRANSPORT

The use of petrol and diesel vehicles in the borough makes up 19%[27] of Merton's emissions as a result of the 600 million kilometres driven in Merton each year.[28] Cars produce more carbon emissions than all other modes of transport put together. Emissions from buses, heavy goods and light goods vehicles also generate significant emissions. Around 1000 vehicles registered in Merton are ultra-low emission[29] (approximately 1.2% of the total number of vehicles), and over 140 charge points have been installed in public spaces.

2050 Vision for Transport:

People will be healthier as a result of more active travel and cleaner air. Walking and cycling will be accessible and be the default choice for most local journeys. Fewer people will own cars and all road vehicles will be electric or use other low carbon fuels. Many neighbourhoods and town centres will be car free. Public transport will be clean and provide an excellent and accessible service.

ACTIONS...
...for residents and communities

There are 77,000 vehicles registered in Merton.[30] By 2050, all residents must stop using petrol and diesel vehicles, which on average generate several tonnes of carbon emissions per year.

Individuals should reduce car use in favour of walking, cycling or using public transport, to increase active and sustainable travel from 58% to 73% by 2041.[31]

Residents should consider whether it is necessary to own a car, as vehicle hire becomes more accessible and lower cost. Where private vehicles are necessary, by 2030, all vehicles should be replaced with ultra-low emission alternatives, which are predicted to have similar lifetime costs to fossil fuel cars by 2025.[32]
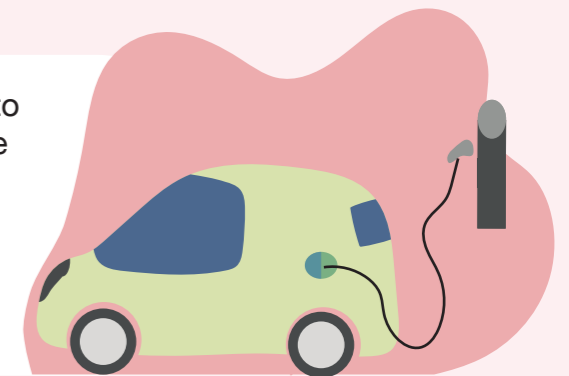
Communities should work together to encourage 20 minutes of active travel a day,[33] and make neighbourhoods more cycle and pedestrian friendly, limiting through-traffic.

Communities should work together to reduce car use and air pollution around schools and densely populated areas,[34] as a reduction in air pollution will also reduce carbon emissions.

ACTIONS...

...for businesses and organisations

All businesses and organisations must ensure that journeys undertaken on their behalf result in net zero emissions by 2050.

Businesses, organisations and schools should implement travel plans[35] which support staff and clients to work remotely or choose sustainable travel alternatives; in particular ceasing the provision of petrol and diesel company cars, limiting parking to essential users and avoiding short-haul flights, which produce the most carbon per kilometre travelled.

Businesses and organisations should implement and actively encourage schemes which help staff into active and sustainable travel, such as the cycle to work scheme[36]; and invest in supporting facilities such as cycle parking. Grants may be available to help install electric charge points.[37]

Case Study

Merton Council has worked for many years with schools to advise on child pedestrian safety and cycle training skills. From the much loved Debra the Zebra, our road safety mascot, to the more recent implementation of School Safety Zones, air quality and safety outside schools has improved.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

Individuals, businesses, organisations and the Council will lobby for greater funding and support a national policy framework which results in an acceleration of active travel and reduced private car use.[38]

The Council will lobby and work with Transport for London (TfL) to improve the services in Merton, accelerate the decarbonisation of public transport to 2050,[39] and encourage the use of public transport (taking into account social distancing measures which may be in place as part of the Covid-19 restrictions).

£ The Council will accommodate the increase in active travel that has resulted from the travel restrictions put in place due to Covid-19, by expanding pavements and increasing the number and range of cycle paths. Where possible, these measures will be made permenant.[40]

By 2022, the Council will carry out a review of the Local Implementation Plan (LIP-3) funding priorities to ensure they are in keeping with the Mayor's Transport Strategy objectives,[41] and net-zero 2050 target, £ and by 2023 work towards the creation of a long-term sustainable transport plan to develop integrated walking, cycling and electric vehicle charging networks by 2050.

£ The Council will support safe, active and sustainable travel in schools, residents and businesses to 2050, and by 2022 explore options that will incentivise people to move away from cars.

By 2021, the Council and TfL will encourage more dockless and electric vehicle hire schemes, and ensure all new licenced private hire vehicles and taxis operating in Merton will be zero emission capable.[42]

By 2021, the Council will review Local Plan policies to encourage a reduction in car use in new developments and offer sustainable transport alternatives.

By 2020/21, the Council will consult on emission-based parking charges to discourage the use of higher polluting vehicles, and by 2025 consider options to achieve a net reduction in parking spaces.

GREENING MERTON

At 28%[43], Merton has one of the highest proportions of tree cover of any London Borough. The growth of vegetation, particularly the approximately 220,000[44] trees, captures a small fraction (0.1%) of Merton's emissions each year. Trees can play an important role in climate adaptation, absorbing air pollution emissions and providing wildlife habitats which may maintain and increase biodiversity.

2050 Vision for a Green Merton:

The borough will have more trees and vegetation for people to enjoy. Town centres and residential areas will feel cooler, be less prone to flooding and have cleaner air. Communities will feel more ownership of public green spaces, more connected to nature and have an improved sense of wellbeing.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

£ The Council will work with organisations to develop a tree strategy by 2022, to increase tree cover by 10% to 2050 and increase public participation.

By 2020, the Council will review planning policies to ensure that, where possible, new developments protect existing vegetation, and add new green cover to mitigate the impacts of climate change such as overheating, flooding and loss of biodiversity.

ACTIONS...

Merton will aim to increase tree cover by 10%[45] by 2050, potentially equivalent to planting around 800 trees every year to 2050. The main opportunities to plant trees are likely to be on private land such as gardens, which hold around two thirds of the trees in Merton.

The Council will plant new trees on public land and council-managed green spaces, and take opportunities to introduce sustainable drainage systems and green verges to 2050.

By 2050, individuals, organisations and business should maximise the amount of vegetation where possible: from adding a window box, to the removing paving,[46] installing a green roof or adding sustainable drainage on their land. Planting a suitable tree can save several tonnes of carbon if allowed to grow to maturity.

Individuals can support community planting by joining a volunteer group,[47] or businesses can sponsor local tree planting events, water newly planted street trees, or take up free tree offers available through organisations such as the Woodland Trust.[48]

Case Study

Merton is one of the few London boroughs to have a longstanding partnership with the voluntary sector with the aim of planting and maintaining community woodlands. Operational since 1992, the volunteer Tree Warden Group Merton, with the support of Greenspaces and Friends groups across the borough, have since planted over 25,000 trees and hedge plants in 28 public open spaces throughout the borough, to create new canopy cover.

2030 COUNCIL TARGET

The Council is responsible for around 2% of the borough's emissions. Services provided on behalf of the Council, such as the management of highways and green spaces, and waste collection make up 16% of the 2030 target. Energy used in the Council's buildings makes up 69% of emissions, followed by streetlighting (10%) and transport (4%).[49]

Vision for 2030:

The Council will provide excellent quality net-zero carbon services to Merton. Council-run buildings and transport will be efficient and will use carbon neutral energy. Service providers will undertake net-zero carbon activities for Merton on behalf of the Council. All Council staff will be making sustainable choices in their travel and workplace.

ACTIONS

The Council will ensure that all new Council buildings and extensions are net-zero carbon, using a 'fabric first' approach, to avoid the cost of expensive retrofit in later years.

£ The Council will convert its operational buildings to net-zero carbon by 2030, including council staff buildings, community schools and leisure centres, through appropriate retrofit measures including improvements to energy efficiency, conversion of gas heating to low carbon alternatives, increasing renewable energy generation and sourcing 100% green electricity.

£ Transport team will convert the Council vehicle fleet to an ultra-low emission alternative by 2030.

Highways team will convert 90% of street lighting to LED by 2030.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

Transport team will introduce a staff travel plan consistent with achieving net-zero carbon.

By 2021, Commercial Services team will put in place procurement governance, processes and procedures to ensure products and services provided to the Council are in keeping with the net-zero carbon targets.

Contract Managers, in conjunction with Commercial Services and South London Legal Partnership, will work with existing service providers on opportunities to reduce carbon emissions in Merton.

Finance team will endeavor to ensure that investments are net-zero carbon by 2030, and will consider ways to positively invest in low carbon business that can deliver carbon offsets.

£ The Council will carry out improvements to Council-operational facilities and trial innovative low carbon measures to support low carbon transport and energy by 2030.

By 2020, Future Merton and Public Health will set up an action group to accelerate change within all Council Departments.

Case Study

The Council has undertaken a 10 year programme of investment to improve the energy efficiency of Council-owned and operated buildings, and install 2MW of solar panels. The energy savings have resulted in a 45% reduction in carbon emissions and significant bill savings.[50]

COSTS

Insulating homes, replacing boilers with low carbon heating, installing renewable energy and purchasing low emission vehicles are more costly than some high-carbon alternatives. However, after the initial investment is made, reducing fuel use or switching to electric can result in long-term fuel bill savings which will benefit many.

Total costs to 2050: £3.1bn

Total potential savings to 2050: £2.1bn

Building Benefits
Warm homes at lower cost

Building Benefits
£1,632m

Building Costs
£2,789m

Green space benefits
Improved health and sense of community

Green space costs
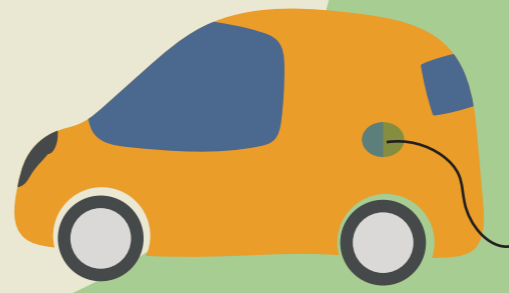£2.4m

Ethical Fashion

Zero Waste Shop

LOCAL PRODUCE

OPEN

OPEN

Transport costs
£292m

Transport benefits
£470m

Transport benefits
Clean air and health benefits from active travel

DELIVERING THE PLAN

ILLUSTRATION NEEDED

MEASURING SUCCESS

By updating Merton's greenhouse gas inventory and developing a Delivery Plan, progress will be monitored with measurable outcomes where possible, and reported through updates on Merton's climate change web pages[51]. The table below shows the main measure and other useful indicators used to track progress:

	Indicator	Baseline Measurement	Final target (2050 unless stated)	Data source
Overall	An overall reduction in carbon emissions that matches the pace and scale of change needed to meet our targets	Borough 2050 target: 708,000 tCO2eq Council 2030 target: 11,149 tCO2eq	Borough 2050 target: Net zero tCO2eq Council 2030 target: Net zero tCO2eq	Council Greenhouse Gas reporting[52]
Green Economy	Decrease in the overall amount of waste produced by Merton	68,009 tonnes of Local Authority collected waste	75% reduction in Local Authority collected waste	Data collected by the South London Waste Partnership[53]
Building & Energy	Increase in the number of buildings with good insulation	22% EPC A-C	100% EPC A-C	CROHM database[54]
Building & Energy	Increase in the proportion of locally produced renewable energy	0.2% of total energy use	10% of total energy use	No accurate data source identified[55]
Transport	Increase in the number of active travel journeys	58% of all travel journeys are active travel	73% by 2041	Data supporting the Local Implementation Plan[56]
Transport	Decrease in number and ownership of petrol and diesel cars registered in Merton	76,780 cars registered in Merton 1,166 electric cars registered in Merton	0 Petrol and diesel cars All vehicles ultra-low emission	Data supporting the Local Implementation Plan[57]/ DfT Vehicle Licencing Statistics[58]
Transport	Increase in the number of electric charge points	143 eletric charge points available for public use	[Target TBC]	Statistics collected by Transport Team
Green Spaces	Increase in the percentage of canopy cover	28%	31%	Open Space Strategy technical report[59]

NEXT STEPS

We hope this plan has helped you to understand what role you may be able to play in meeting the borough's carbon reduction target and how the Council are looking to support you. So what now?

STEP 1 **Get informed:** There is a wealth of information available about what changes you can make to help combat climate change. As a starting point, check out our website (https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change/ climate-emergency), articles and facebook information, which provide more information and links on what you can do.

STEP 2 **Take up the challenge:** Can you make changes in your home, your work, your travel, your purchases or your connection with others that will help? Small actions make a big difference when everyone is involved.

STEP 3 **Join in with community action:** Many local groups are working to make changes for the better in Merton and reduce carbon emissions. Find out more about voluntary services in Merton see https://www.mvsc.co.uk/homepage, Merton's Climate Implementation Group [add web link] or maybe start your own group. Contact the Council at Future.Merton@Merton.gov.uk for advice and support.

STEP 4 **Lobby for change:** Your voice with others can make change happen faster. Join with us to seek more funding and policy changes at a national level that will help Merton to reduce carbon emissions and adapt to the effects of climate change.

STEP 5 **Follow progress:** Look out for updates and progress through the climate emergency website (https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change/climate-emergency).

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