

A CLIMATE CHANGE STRATEGY AND ACTION PLAN FOR MERTON

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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. Now, alongside 26 London councils and 60%ⁱ of local authorities across the UK, the London Borough of Merton has publically committed to taking action. 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 90% of respondents stating that they they felt personally responsible to act. 85% of respondents supported further Council action.

The wave of public support did not come as a surprise. With a climate strategy in place since 2009, Merton has a history of taking strong action in this area. The Council has already achieved a 40% reduction in carbon emissions across the Council's estateⁱⁱ and supported numerous policies and projects which take us in the right direction. Despite all of our past efforts, we need a major expansion and acceleration of action to ensure that Merton can make the major transitions in our energy systems, our buildings, our transport, our public spaces and our economy 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 shock. 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 emissionsⁱⁱⁱ. And the local effects are tangible: improvement in the air, the Wandle River, cleaner streets and 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 changes that maintain and build upon these environmental and community benefits we have experienced.

The Covid-19 outbreak also serves to remind us that 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 four major factors, and the extent to which they can be realised is uncertain. Firstly, National Government must provide the right policy framework to allow the transition to take place. Secondly, sufficient funding to support the actions is needed, which is particularly poignant as the Covid crisis has put extra strain and uncertainties on existing budgets and major funding gaps at national level still remain. Thirdly, with each individual responsible for producing roughly 2.9 tonnes of carbon emissions^{iv}, everyone in Merton must share the responsibility. Businesses, service providers, residents and consumers must all be part of the solution.

We have already made a good start. We 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. We 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. Some say Merton is too small to make a difference in this global problem. I say that we have the potential to reduce nearly 0.7 million tonnes of carbon emissions each year. We can and must play our part.

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

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CLIMATE STRATEGY AND ACTION PLAN ON A PAGE

[Add a 1 page or double page infographic, summarising the whole report which can be used separately for comms, schools, and the website.]

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 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.

Vision for a net-zero 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.

Strategic approach: 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 associated with delivering the actions.

Delivering the plan: shows how, if actions across all sections are completed the net-zero targets can be achieved, how we will measure success and our next steps.

Terms used

For the purposes of this document “carbon emissions” or “emissions” refer to all greenhouse gases which 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^v.

Carbon neutral or net-zero describe where the overall balance of greenhouse gas 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 greenhouse gas reduction targets. The first is to produce net-zero emissions in the borough by 2050. Meeting this target is consistent with current national legislation^{vi} and the Mayor of London’s climate action plan^{vii}, but our aim will be to achieve the targets 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, a technical support was commissioned. The emissions inventory and decarbonisation pathways model^{viii} 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^{ix}. The action plan has sought to address all major sources of emissions that Merton can influence and has included 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 and residents^x. The Council has an important part to play in 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. A list of sources for opportunities to get involved or apply for funding can be found on the Council’s climate change page^{xi}. It also sets out how the Council intends 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^{xii} has been published 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 a world with average temperatures above 2 degrees will be far higher.

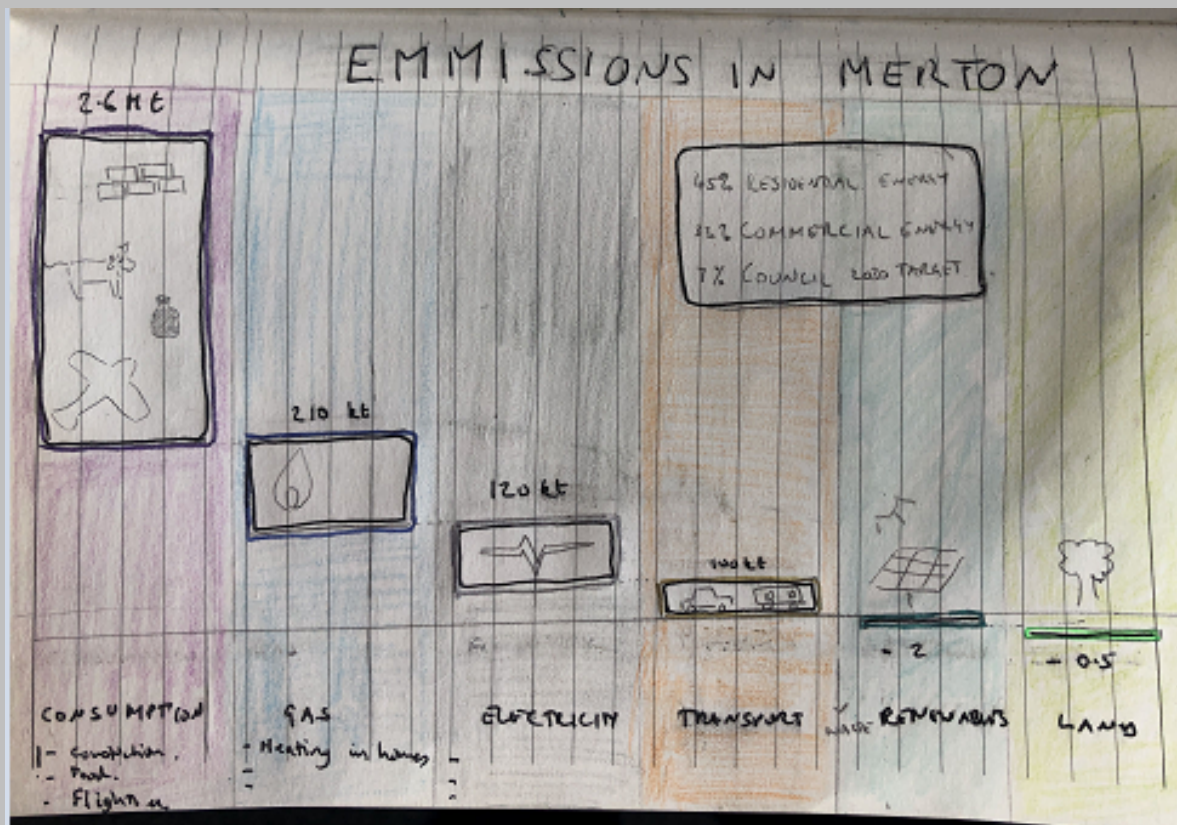
After the initial investment is made, a reduction or change in energy supply can result in long-term cost savings which will benefit many (such as bill savings from energy efficiency measures in homes).

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 that are within our financial means. This means that currently, many of the actions needed to meet the target are aspirational. Those that require additional funding are marked on the plan with the symbol “\$”.

MERTON'S GREENHOUSE GAS EMISSIONS

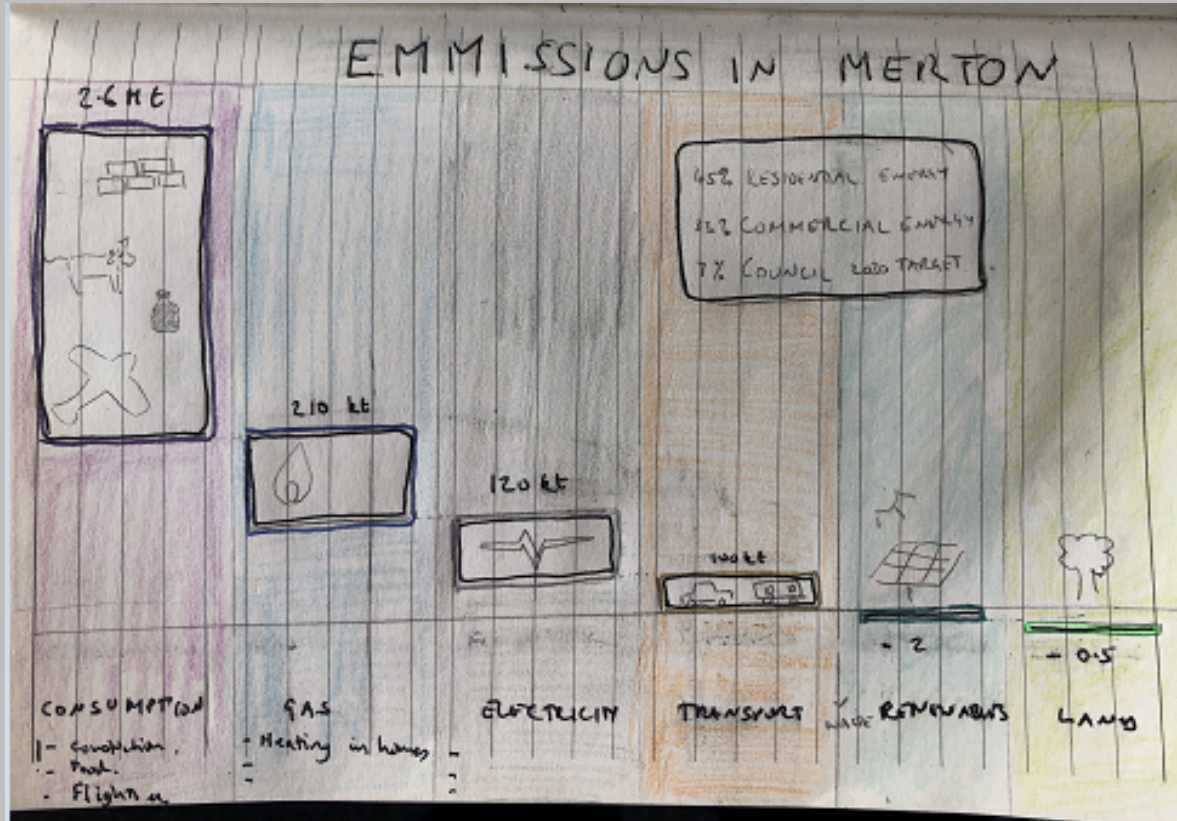
2050 borough target

[Add diagram showing Merton's emissions for the 2050 target, similar to the draft below]



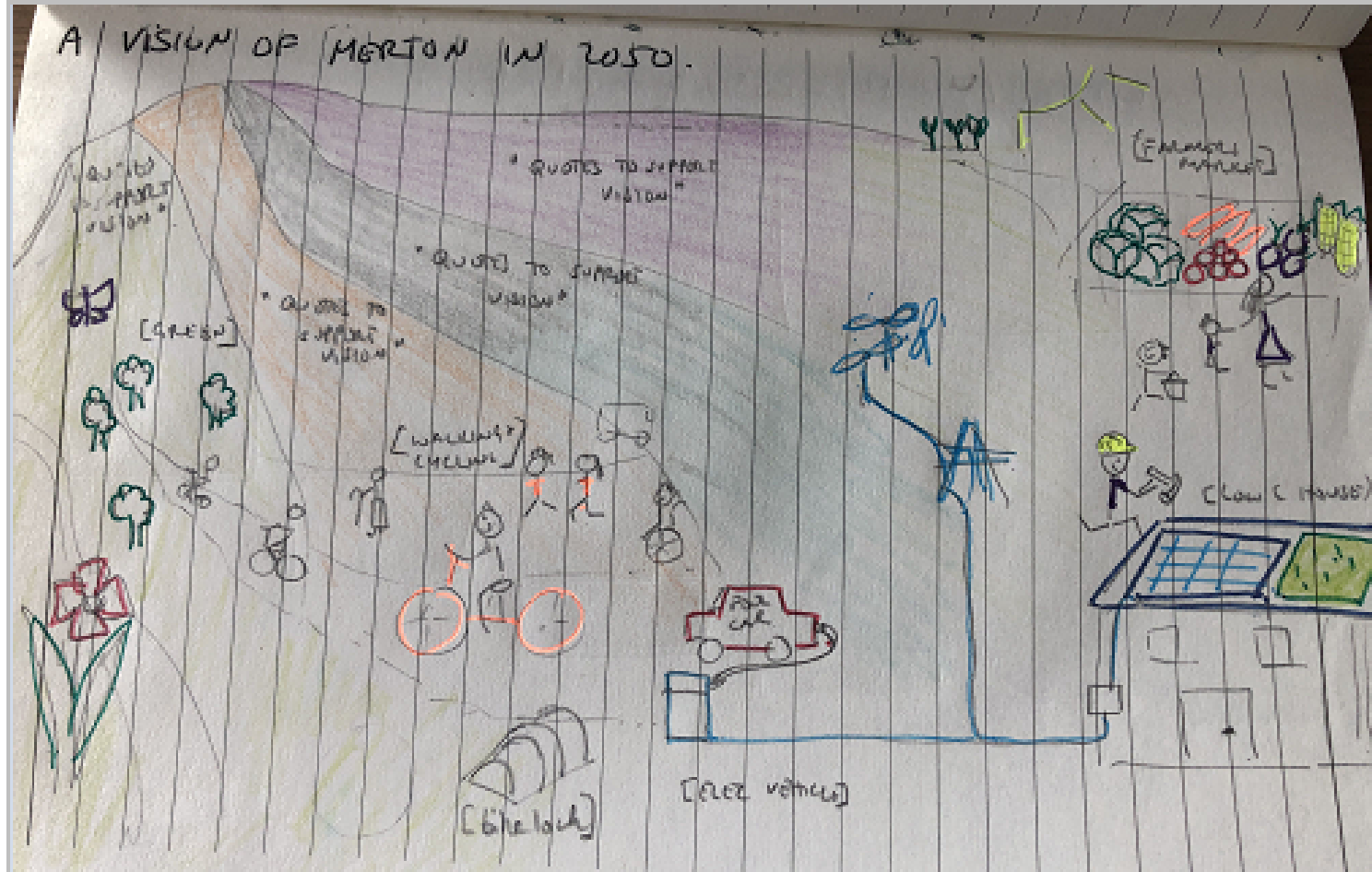
2030 council target

[Add diagram showing Merton's emissions for the 2030 target, similar to the draft in the page above]



A VISION FOR MERTON

[Add diagram showing Merton's emissions for the 2030 target, similar to the draft in the page above]



“vision” quotes to include in the diagram above:

Our vision is of a better future with healthier lives and more connected communities.

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.

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. 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.

Transport: People will be healthier as a result of more active travel and cleaner air. Walking and cycling will be accessible to all. Less people will own cars and all road vehicles will use electric or 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.

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.

Council vision for the 2030 target: 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.

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, areas 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. 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. Low carbon buildings and energy including reducing energy consumption, the replacement of gas heating (with heat pumps), and an increase in locally generated renewable electricity. 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 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 providing shade to guard against more prolonged and intense spells of hot weather, manage the increased risk of local flooding by providing sustainable drainage and increasing the resilience 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 limit 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, increasing social inclusion and reduce poverty. We also want to prevent the vulnerable being disproportionately affected by the impacts of climate change, or exposed to the 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 undertaking regular greenhouse gas inventories, we will track major actions with measurable outcomes where possible, and regularly report on progress through updates on the climate change website.

ACTION PLAN

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^{xiii}.

2050 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.

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

ACTIONS REQUIRED TO REDUCE GREENHOUSE GAS EMISSIONS

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 diet to a reduced-meat diet**^{xiv} can reduce your dietary emissions by 35%^{xv}; and is often healthier and cheaper. Eating seasonally and locally helps reduce the emissions associated with the production and transportation of food respectively. Other actions include **choosing biodegradable products** and **investing in companies that support a low carbon economy**.

Individuals, businesses and organisations **should prevent waste where possible** to achieve a 75% reduction in waste^{xvi}; 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 plastic 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^{xvii}.

Business 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 investing in or procuring companies which produce high emissions.

Businesses and organisations should undertake an **environmental audit**^{xviii} or **sign up to a sustainability charter or certification scheme** and provide **information on the carbon footprint of products and services** to customers.

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

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.

[§]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 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 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.

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

By 2021, the Council will promote a green and circular economy in Merton through **strategic planning** documents such as the Local Plan and the 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 AND ENERGY

Energy used to heat and power buildings in the borough makes up around 79% 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 half of the 88,000 homes^{xix} 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%.

2050 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.

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.

ACTIONS REQUIRED TO REDUCE GREENHOUSE GAS EMISSIONS

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^{xx}, 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^{xxi}. Until March 2022, heat pumps may be eligible for 7 years of additional payment through the Renewable Heat Incentive (RHI)^{xxii}, or potentially from a proposed Government grant scheme^{xxiii}.

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^{xxiv}, and the Government's Smart Export Guarantee^{xxv} can help to minimise and pay back initial 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^{xxvi}.

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 1°C, 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 per year.^{xxvii} Energy efficient appliances, installing smart-meters and smart charging will also reduce energy consumption.

Property developers, landlords and individuals planning renovations

By **2025 all new buildings should be capable of operating at net zero carbon emissions^{xxviii}** if possible to avoid the cost of expensive retrofit in later years^{xxix}, 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.

Businesses, organisations 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.

ACTIVITIES THAT ENABLE CHANGE TO HAPPEN

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

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 individual, business and community 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.

[§]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. [§]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.

TRANSPORT

The use of petrol and diesel vehicles in the borough makes up 19%^{xxx} of Merton's emissions as a result of the 600 million kilometres driven in Merton each year^{xxxii}. 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 of the ~77,000 vehicles registered in Merton are ultra-low emission^{xxxiii}, and so far 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.

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 improve air quality and safety outside schools has improved.

ACTIONS REQUIRED TO REDUCE GREENHOUSE GAS EMISSIONS

Residents and communities

There are 77,000 vehicles registered in Merton^{xxxiii}. 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^{xxxiv}.

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^{xxxv}.

Communities should work together to encourage **20 minutes of active travel a day^{xxxvi}**, and **make neighbourhoods more cycle and pedestrian friendly**, limiting through-traffic.

Communities should work to **reduce car use and air pollution around schools and densely populated areas^{xxxvii}**; as a reduction in air pollution will also reduce carbon emissions.

Organisations and businesses

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

Businesses, organisations and schools should implement travel plans^{xxxviii} 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^{xxxix}; and invest in supporting facilities such as cycle parking. Grants may be available to help install electric charge points^{xl}.

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^{xli}.

The Council will lobby and work with Transport for London (TfL) to improve services and **accelerate the decarbonisation of public transport** to 2050^{xlii}, 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 permanent^{xliii}.

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^{xliv}, 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**.^{xlv}

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, 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%^{xlvi}, Merton has one of the highest proportions of tree cover of any London Borough. The growth of vegetation, particularly the approximately 220,000^{xlvii} trees, captures a small fraction (0.08%) 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.

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.

ACTIONS REQUIRED TO REDUCE GREENHOUSE GAS EMISSIONS

Merton will achieve a **10% increase in tree cover**^{xlviii} 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.

Individuals, businesses organisations and developers

By 2050, individuals, organisations and business should **maximise the amount of vegetation** where possible: from adding a window box, to the removing paving^{xlix}, installing a green roof or add sustainable drainage. 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**^l, or businesses can **sponsor local tree planting** event water a newly planted street trees, or take up free tree offers available through organisations such as the Woodland Trust^{li}.

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.

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, waste collection make up at least 16% of the 2030 target. Energy used in the Council's buildings make up 69% of emissions, followed by transport (5%).^{lii}

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.

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 of 2MW of solar panels. The energy savings have resulting in a 45% reduction in carbon emissions and significant bill savings.^{liii}

ACTIONS REQUIRED TO REDUCE GREENHOUSE GAS EMISSIONS

[§]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 capacity and sourcing 100% green electricity.

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.

[§]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

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.

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**.

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

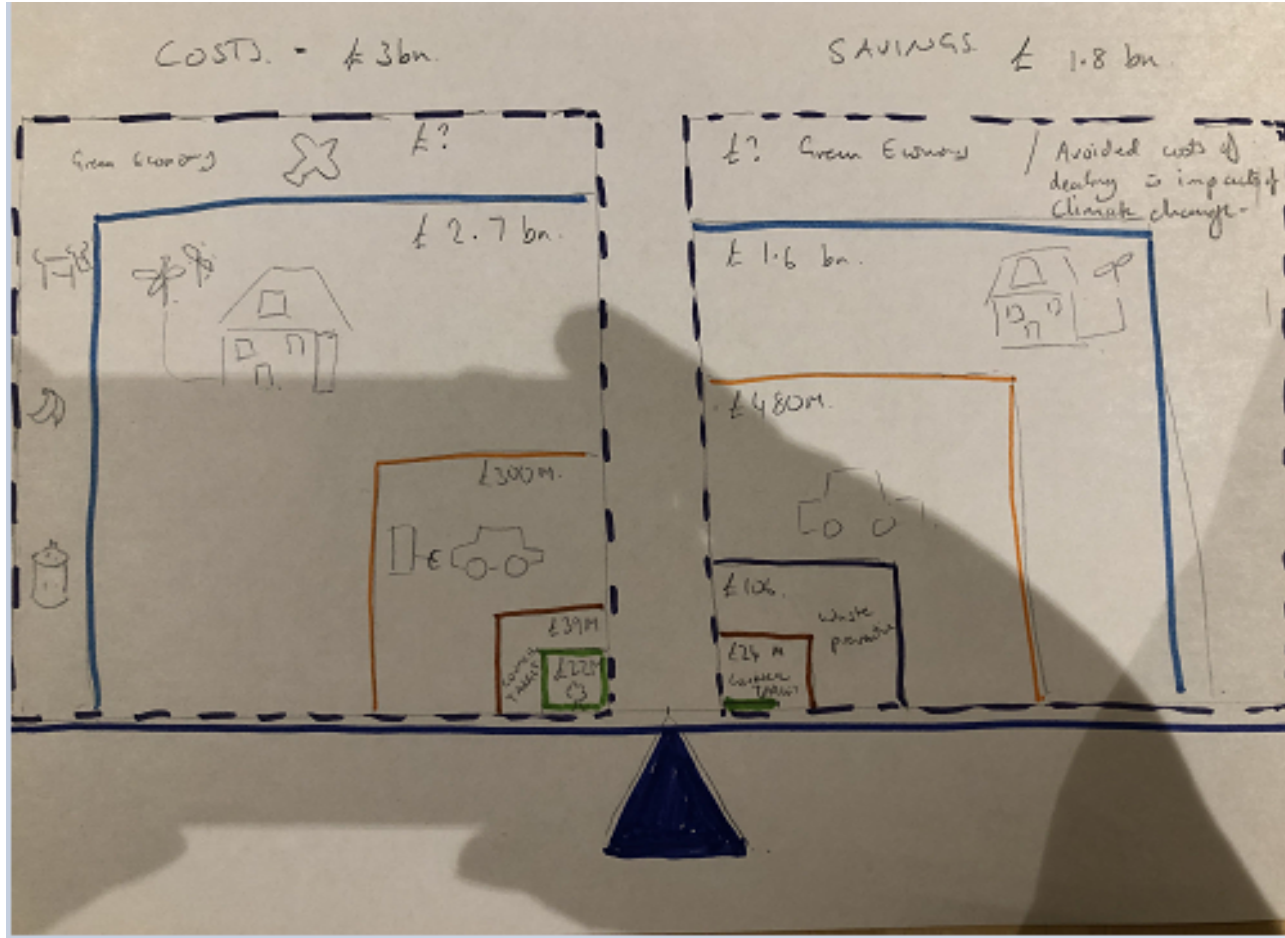
Transport team will introduce a **staff travel plan** consistent with achieving net-zero carbon.

[§]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**.

COSTS

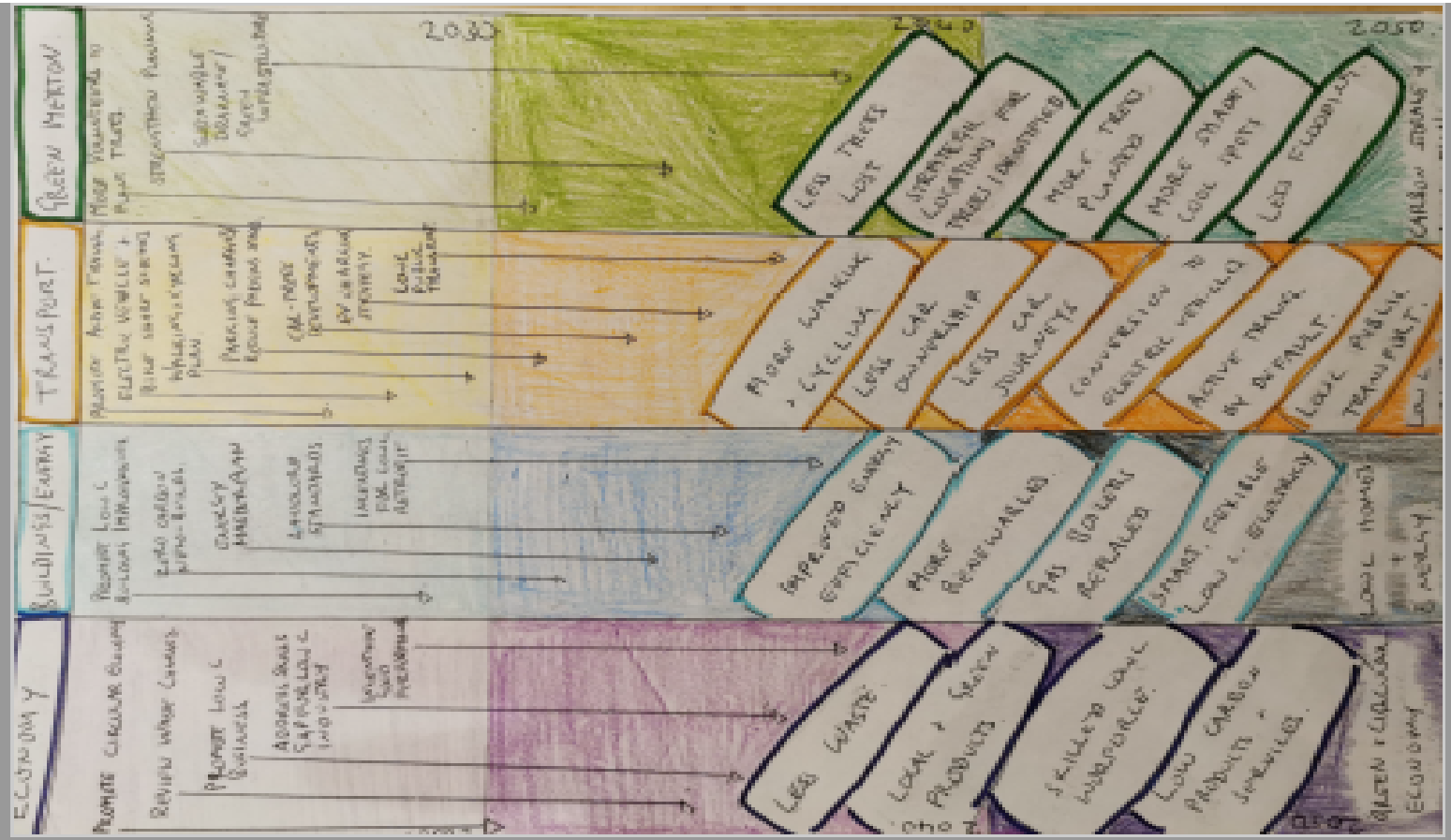
[add double page diagram to show costs to Merton and potential savings. Cost in the draft diagram are examples only]



DELIVERING THE PLAN

How the actions will help us to meet the targets

[add image which shows the how the actions will lead to a reduction in greenhouse gas emissions and meet Net zero targets – work in progress]



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^{liv}. The table below shows the main measure and other useful indicators used to track progress:

	Indicator	Baseline In 2020	Final target (by 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: Y tCO ₂ eq Council 2030 target Y tCO ₂ eq	Borough 2050 target: Net zero tCO ₂ eq Council 2030 target Net zero tCO ₂ eq	Council Greenhouse Gas reporting ^{lv}
Green Economy	Decrease in tonnes of waste produced by Merton.	[tcb tonnes LA collected]	[75% reduction in LA collected waste]	Data from Local Authority Waste Collections ^{lvi} Estimate based on Defra statistics ^{lvii}
Buildings and Energy	Improved energy efficiency of Merton’s building stock	22%EPC A-C 78%EPC D-G	100% EPC A-C	CROHM database ^{lviii}
	Increase in the number of buildings with solar panels.	c1000	11,000	No accurate data source identified to monitor solar PV installations ^{lix}
Transport	Increase in number of active travel journeys.	58%	73% by 2041	Data supporting the Local Implementation Plan ^{lx}
	Decrease in number and shift in vehicle ownership	76,780 cars 1,166 EV	0 Petrol and diesel cars All vehicles ultra-low	Data supporting the Local Implementation Plan ^{lxi} / DfT Vehicle Licencing Statistics ^{lxii}
	Number of electric charge points.	143	[Target TBC]	Statistics collected by Transport team
Green spaces	Percentage increase in canopy cover.	28%	31%	Open Space Strategy technical report (not yet published)

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 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: Decide on what can you change 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 taking 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.

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 support changes in Merton to reduce carbon emissions and help us to adapt to the effects of climate change.

Follow progress: Look out for updates on actions completed progress in reducing carbon emissions through the climate emergency website (<https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change/climate-emergency>).

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- i May 2020: <https://www.climateemergency.uk/blog/list-of-councils/>.
- ii Merton Council greenhouse gas reporting: not yet published.
- iii April 2020: <https://www.carbonbrief.org/analysis-coronavirus-set-to-cause-largest-ever-annual-fall-in-co2-emissions>.
- iv BEIS Statistics, June 2019: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017>.
- v Merton's air quality action plan, 2018: <https://www.merton.gov.uk/communities-and-neighbourhoods/pollution/air-quality-and-air-pollution/local-air-quality-management>.
- vi The Climate Change Act, which sets a net-zero carbon target in 2050, amended 2019: <https://www.legislation.gov.uk/ukdsi/2019/9780111187654>.
- vii The London Mayor's 1.5 degree compatible action plan, 2018: <https://www.london.gov.uk/what-we-do/environment/climate-change/climate-action-plan>.
- viii London Borough of Merton Greenhouse Gas Inventory Report. London Borough of Merton Pathways to Decarbonisation Report. London Borough of Merton Greenhouse Gas Tracking Report: [Add link once published]
- ix The Future of Urban Consumption in a 1.5 degree World, June 2019: <https://www.arup.com/perspectives/publications/research/section/the-future-of-urban-consumption-in-a-1-5c-world>.
- x Key sources include Aether's technical report, 2020 [add link once published] and GLA Zero Carbon Pathway, 2018: <https://data.london.gov.uk/dataset/london-s-zero-carbon-pathways-tool> and SCATTER, 2020: <https://scattercities.com/> and the CCC Net Zero report, 2020: <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>
- xi <https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change>
- xii The delivery plan [add link once published]
- xiii London Borough of Merton Greenhouse Gas Inventory Report [add link once published]
- xiv May 2020: <https://www.bbc.co.uk/news/science-environment-46459714>
- xv Net Zero – The UK's contribution to stopping global warming, 2019: <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>
- xvi London Borough of Merton Greenhouse Gas Inventory Report [add link once published]
- xvii The Future of Urban Consumption in a 1.5 degree World, June 2019: <https://www.arup.com/perspectives/publications/research/section/the-future-of-urban-consumption-in-a-1-5c-world>.
- xviii May 2020: <https://www.britsafe.org/audit-and-consultancy/health-safety-and-environmental-audit/iso-14001-environmental-audit/>
- xix March 2019: <https://www.merton.gov.uk/planning-and-buildings/planning/local-plan/newlocalplan/local-plan-stage-2-consultation-results>
- xx May 2020: <https://www.which.co.uk/money/mortgages-and-property/home-movers/selling-a-house/epcs-explained-a6nmp1q099fb>
- xxi Unless the Government plan to supply a low carbon gas through the gas grid, pending the publication a clean heat strategy (October 2018: <https://www.gov.uk/government/publications/clean-growth-strategy>)
- xxii May 2020: <https://www.ofgem.gov.uk/environmental-programmes/domestic-rhi>
- xxiii May 2020: <https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>
- xxiv May 2020: <https://www.solartogether.co.uk/merton/home>
- xxv January 2020: <https://www.ofgem.gov.uk/environmental-programmes/smart-export-guarantee-seg/about-smart-export-guarantee-seg>
- xxvi May 2020: <https://www.london.gov.uk/what-we-do/environment/london-power>
- xxvii May 2020: <https://energysavingtrust.org.uk/blog/energy-saving-budget>
- xxviii January 2020, <https://www.leti.london/cedg>
- xxix <https://www.theccc.org.uk/wp-content/uploads/2019/07/The-costs-and-benefits-of-tighter-standards-for-new-buildings-Currie-Brown-and-AECOM.pdf>
- xxx London Borough of Merton Greenhouse Gas Inventory Report
- xxxi May 2019: <https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#traffic-volume-in-kilometres-tra02>
- xxxii May 2020: <https://www.gov.uk/government/organisations/department-for-transport/about/statistics>

xxxiii Local Implementation Plan, September 2019: <https://www.merton.gov.uk/streets-parking-transport/lip3>

xxxiv Local Implementation Plan, September 2019: <https://www.merton.gov.uk/streets-parking-transport/lip3>

xxxv May 2019: <https://www.theccc.org.uk/publication/net-zero-technical-report/>

xxxvi May 2020: <https://www.merton.gov.uk/healthy-living/sport-and-healthy-living/walk-4life>

xxxvii 2018: <https://www.merton.gov.uk/communities-and-neighbourhoods/pollution/air-quality-and-air-pollution>

xxxviii May 2020: <https://www.globalhealthyworkplace.org/global-healthy-workplace-certification/>

xxxix May 2020: <https://www.gov.uk/government/publications/cycle-to-work-scheme-implementation-guidance>

xl May 2020: <https://www.gov.uk/government/news/update-on-the-infrastructure-grants-schemes>

xli March 2020: <https://www.gov.uk/government/publications/creating-the-transport-decarbonisation-plan>

xlii 2019: <http://content.tfl.gov.uk/tfl-business-plan-2019.pdf>

xliii April 2020:
<https://www.merton.gov.uk/assets/Documents/Merton%20Covid%20Transport%20Strategy%207%20May%202020.pdf>

xliv 2018: <https://tfl.gov.uk/corporate/about-tfl/the-mayors-transport-strategy>

xlv May 2020: <https://tfl.gov.uk/info-for/taxis-and-private-hire/emissions-standards-for-phvs>

xlvi Unpublished

lvii OPEN SOURCE CANOPY COVER AUDIT (OSCCA), Merton Council 2014, unpublished

lviii <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands/tree-canopy-cover-map>

lix https://www.london.gov.uk/sites/default/files/grey_to_green_guide.pdf

l <https://www.mvsc.co.uk/civCRM/profile/view?reset=1&id=2802&gid=1>

li <https://www.woodlandtrust.org.uk/protecting-trees-and-woods/campaign-with-us/big-climate-fightback/>

lii London Borough of Merton Greenhouse Gas Inventory Report. London Borough of Merton Pathways to Decarbonisation Report. London Borough of Merton Greenhouse Gas Tracking Report.

liii <https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change/what-merton-has-already-done-to-address-climate-change>

liv <https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change>

lv <https://www.merton.gov.uk/planning-and-buildings/sustainability-and-climate-change/greenhouse-gas-emission-reports>

lvi Data from South London Waste Partnership used for the creation of national statistics:
<https://www.wastedataflow.org/>

lvii <https://www.gov.uk/government/statistics/uk-waste-data>

lviii <https://parityprojects.com/platform/>

lix Initial estimate from Feed in Tariff: <https://www.ofgem.gov.uk/publications-and-updates/feed-tariff-installation-report-31-march-2020>

lx indicator targets for modal shift <https://www.merton.gov.uk/streets-parking-transport/lip3> (LIP (3) Table ST07)

lxi Indicator target for reduced car ownership <https://www.merton.gov.uk/streets-parking-transport/lip3> (LIP (3) Table ST07)

lxii <https://www.gov.uk/government/collections/vehicles-statistics> (Table veh132a, Q4 2018)