London Ambulance Service
NHS Trust

LAS Carbon Neutral Plan

April 2022 – March 2025

Document Control

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1. Introduction

Climate change presents one of the most significant public health emergencies. Without action and adaptation, the changes to our climate will disrupt care, and affect patients and the public at every stage of life, with poor environmental health contributing to major diseases, including cardiac problems, asthma and cancer.

NHS organisations, like the London Ambulance Service NHS Trust (LAS), have social and environmental responsibilities as public sector anchor institutions[1], to positively contribute to the local areas that they serve in ways beyond providing direct health care alone. This is a social responsibility that is embedded in legislation (including the Public Services (Social Value) Act 2012), in the terms of the new NHS standard contract, and in NHSE/I national guidance.

Most recently, in October 2020 NHSE/I made the case for co-ordinated action across all NHS organisations to reduce their climate impact, setting an ambition to be the world's first 'net zero' national health service. Two headline targets now set the requirements for all NHS organisations to be: net zero for the emissions that they directly control by 2040; and net zero for the wider emissions that they can influence by 2045.

Over the last decade, the LAS has taken some actions to reduce the environmental impact of its operations, and this has included:

- The replacement of non-ULEZ compliant vehicles with compliant models;
- The introduction of zero emissions vehicles across sections of the non-blue-light fleet;
- Increasing the proportion of calls that are responded to by Hear and Treat where appropriate;
- Improving the way that waste is disposed of to ensure that LAS waste never ends up in a landfill; and
- Ensuring that all recent construction projects meet at least BREEAM 'Very Good', or 'Excellent' classification where they are new builds.

Although progress has been made in recent years, sustainability initiatives have often not been co-ordinated across the organisation, and in many cases, environmental improvements may have been delivered as unintended benefits from projects that have been driven by clinical need or a requirement to improve efficiency.

Recognising the opportunities that there are to go further and faster in reducing the environmental impact of our operations, this LAS Carbon Neutral Plan sets out our approach to deliver against our net zero targets, and outlines the specific set of initiatives that will be delivered on the first three years of that journey, to March 2025.

1.1. Purpose of this document

This document is the London Ambulance Service Green Plan and sets out the steps that will be taken to meet the NHSE/I net zero objectives grouped across six areas of the organisation, including:

- Clinical operations
- Estates, facilities and utilities
- Fleet and staff transport
- Procurement and supply chain
- Digital
- People, Culture and Communications

In accordance with national guidance, this Carbon Neutral Plan articulates specific commitments and initiatives that will be delivered across each of the six areas of focus from April 2022 – March 2025. The plan will be updated on an annual basis to re-prioritise initiatives, where required, and to enable continued and detailed sustainability planning on a three-year time horizon.

[1] The Health Foundation 'The NHS as an anchor institution' at https://www.health.org.uk/news-and-comment/charts-and-infographics/the-nhs-as-an-anchor-institution

1.2. Dependencies with other strategies and policies

This plan has a number of critical dependencies with other LAS strategies that must be well managed in order to ensure successful delivery of net zero objectives. These dependencies include the following:

Strategy	Dependency
Fleet Strategy	Achievement of net zero interim targets requires LAS to transition to a fully zero-emission fleet by 2032, and this will require the first electric DCAs and blue-light cars to be brought into the service from 2024/25 at the latest.
Estates Strategy	To enable the delivery of a zero emissions fleet, the appropriate vehicle charging infrastructure must be in place to allow the first electric DCAs and blue-light cars to be used in active service by 2024/25 at the latest. Achievement of net zero interim targets will also require the existing estate to be made more energy efficient and for all remaining gas boilers to be replaced with renewable sources of heating by 2032.
Clinical Strategy	Future refreshes of the clinical strategy should consider how changes in clinical practice may impact emissions and reduce the LAS impact on the environment, with a particular focus on reducing Entonox emissions and improving the way that clinical sharps waste is disposed of. Changes to clinical practice may require 'trade-offs' from our traditional delivery / response model, and these should be considered as part of any refresh.
Digital Strategy	Achievement of net zero objectives will require the digital technologies to enable new ways of working for clinical, support service and corporate processes, to minimise journeys, where appropriate, and make decisions based on access to comprehensive and robust sustainability datasets.
Sustainable Procurement Policy	Achievement of net zero across our wider footprint will require successful influence of supplier behaviour, the routine capture of supplier sustainability data, and the prioritisation of sustainability in the down-selection criteria of procurements.
Agile Working Policy	Achievement of net zero across our wider footprint will require staff to be able to work flexibly from different locations to minimise the need for unnecessary journeys to headquarters or another office, where this can be avoided.
Waste Management Policy	Achievement of net zero objectives requires LAS to reduce the waste that it generates, and to dispose of waste that is generated higher up the waste hierarchy.

1.3. Structure of this document

The table below summarises the content in each section of the document:

Chapter	Headline content
Chapter 2: The need for the LAS Carbon Neutral Plan	Chapter 2 makes the case for why a Carbon Neutral Plan is needed for the LAS. This case will be built from: • Social responsibilities based on the health impacts of climate change • The scale and sources of the negative environmental impacts of LAS operations, and • The national and regional policy requirements for a Green Plan
Chapter 3: Delivering a Greener LAS	Chapter 3 describes the pathway to a net zero LAS by articulating the sustainability priorities of the six areas of the organisation.
Chapter 4: Ensuring delivery of the LAS Carbon Neutral Plan	Chapter 4 describes the assurance and governance approach through to Board-level that is required to ensure committed, co-ordinated and sustained delivery of the Carbon Neutral Plan. The section also describes the delivery support that will be required to ensure there is sufficient capacity and capability to deliver the plan.
Chapter 5: Conclusion and immediate actions	Chapter 5 summarises the key themes of the document and sets out the immediate actions that will be taken after Trust Board approval of the plan.
Appendix A-C	The main body of the plan is supported by a number of appendices which provide supplementary information, including a list of specific actions that will be delivered across the six areas of focus to March 2025 (Appendix A).

2. The need for the LAS Carbon Neutral Plan

A number of drivers set out the case for the development and delivery of an LAS Carbon Neutral Plan. This section covers the following:

- The health impact of climate change;
- The NHS impact on the environment;
- The LAS impact on the environment;
- National policy and contractual requirements for a Green Plan; and
- London Mayor policy requirements to improve environmental sustainability.

2.1. The health impact of climate change

The Lancet Commission has called climate change 'the biggest global health threat of the 21st century'. More intense storms and floods, more frequent heatwaves and the spread of infectious disease from climate change threaten to undermine years of health gains.

A number of sources contribute evidence around the health impacts of climate change[2] [3] [4] [5] [6] [7] [8] which have been summarised by *Figure 1* below:

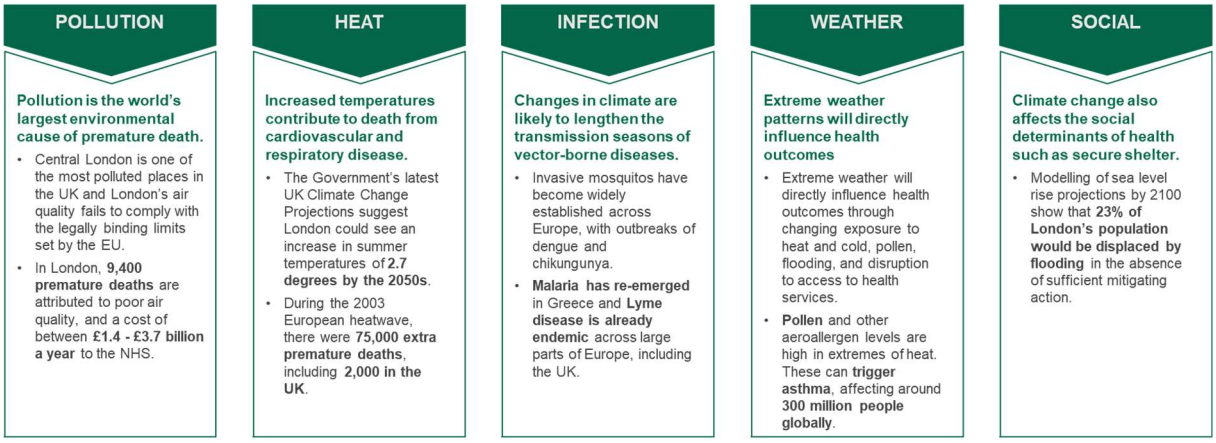

Figure 1: The health impact of climate change

In London, we have seen wildfires at Epping Forest (2013 and 2018) and earlier this year ambulances were diverted away from Whipps Cross Hospital due to floods, following heavy rain across the capital. The situation is getting worse, with nine out of the 10 hottest years on record occurring in the last decade and over 2,500 people killed by heatwaves in England in 2020[9], representing an increase of 1,600 from the year before.

Climate change also presents as a public health issue as the consequences of pollution and adverse weather disproportionately affect deprived and vulnerable communities, and in doing so, widen health inequalities. Without accelerated action, climate change will increasingly threaten the foundations of good health, with direct and immediate consequence for patients, the public and the NHS.

[2] London Air '*Is air pollution worse in London?*' at London Air Quality Network Guide
[3] London Councils '*Air pollution and the effect on our health*' at Air pollution and the effect on our health | London Councils
[4] Carbon Brief 'Impact of climate change on health is 'the major threat of 21st century' at Impact of climate change on health is 'the major threat of 21st century' | Carbon Brief
[5] The Lancet Infectious Diseases *'Effect of climate change on vector-borne disease risk in the UK'* at Effect of climate change on vector-borne disease risk in the UK - ScienceDirect
[6] BMC '*Health impacts of climate change and health and social inequalities in the UK*' at Health impacts of climate change and health and social inequalities in the UK | Environmental Health | Full Text (biomedcentral.com)
[7] World Health Organization '*Climate change and health*' at Climate change and health (who.int)
[8] Earth.org 'Sea level rise projection map – London' at Sea Level Rise Projection Map - London | Earth.Org - Past | Present | Future
[9] Public Health England (2020) *'PHE heatwave mortality monitoring'* at Heatwave mortality monitoring report: 2020 - GOV.UK (www.gov.uk)

2.2. The NHS impact on the environment

As the largest employer in the UK, the impact that the NHS has on the environment is enormous. The NHS produces around 22.8 million tonnes of carbon emissions each year which accounts for 25% of national public sector emissions, and 4% of the UK's overall carbon footprint.

In 2008, the Climate Change Act set national targets for the reduction of carbon emissions in England, against a 1990 baseline. Since then, considerable progress has been made in reducing the NHS carbon footprint, with a 62% reduction in emissions in 2019 which exceeds the 37% requirement for 2020 which is outlined in the Climate Change Act.

Although significant progress has been made, the targets set out in the Climate Change Act do not cover the full scope of emissions that are generated from the NHS, and new NHSE/I guidance proposes that a wider scope of emissions should be used to monitor and measure the environmental impact of all NHS organisations. The wider measures are based on the Greenhouse Gas Protocol (GHGP) scopes, and the emissions sources within these scopes are summarised by *Figure 2* below.

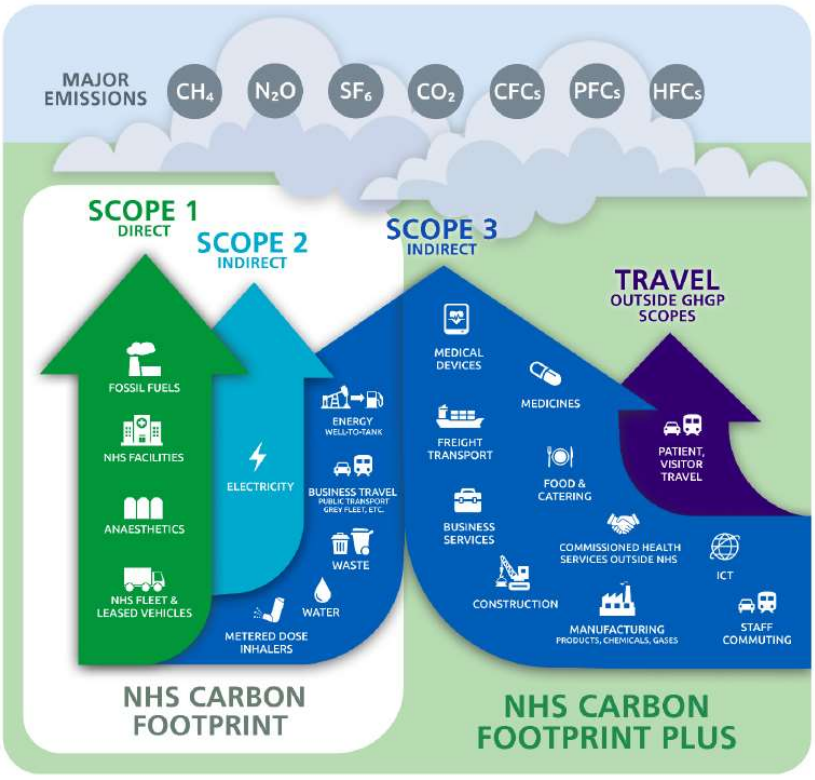

Figure 2: Emissions sources in scope for the 'NHS Carbon Footprint' and the 'NHS Carbon Footprint Plus'

To reduce the size of the NHS Carbon Footprint, and the wider NHS Carbon Footprint Plus, co-ordinated action is required by all NHS organisations across a wide range of emissions sources, including:

- Transitioning from fossil fuels to renewable power to light, heat and cool NHS estate;
- Transitioning to cleaner, emissions-free fleet and corporate vehicles;
- Reducing the waste that is generated, and re-using or recycling to minimise the waste that is sent to landfill;
- Reducing the environmental impact of carbon-intensive anaesthetic gases;
- Reducing the negative environmental impact generated across the supply chain; and
- Increasingly delivering front-line and support services remotely to reduce the emissions related to face-to-face services.

Analysis carried out by NHSE/I suggests that while the greatest environmental gains can be made in hospitals, change will be needed across every setting of care. *Figure 3* overleaf suggests where the

largest areas of sustainability opportunities exist for different types of NHS organisations, and across different components of the NHS Carbon Footprint Plus.

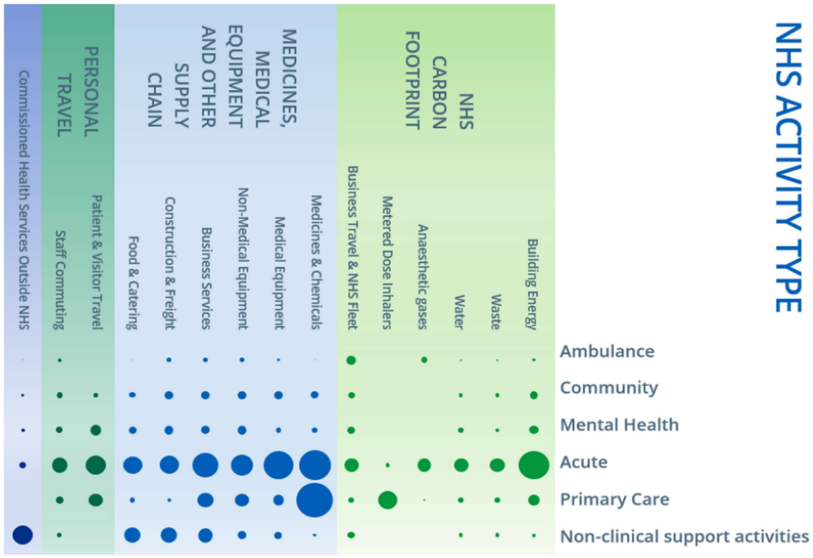

Figure 3: Areas of sustainability opportunity across all parts of the NHS

The largest sustainability opportunities for the ambulance sector relate to their fleet, use of anaesthetic gases, business services and non-medical equipment.

2.3. The LAS impact on the environment

2.3.1. NHS Carbon Footprint

Every year, the London Ambulance Service contributes an estimated 52,971 tonnes of carbon emissions, which includes c.30,554 tonnes of carbon emissions that we directly control through our fuel, electricity, gas, water, waste and Entonox (core components of the NHS Carbon Footprint in *Figure 2*). Around 36% of our NHS Carbon Footprint emissions are generated by our fleet where we use over four million litres of diesel fuel every year.

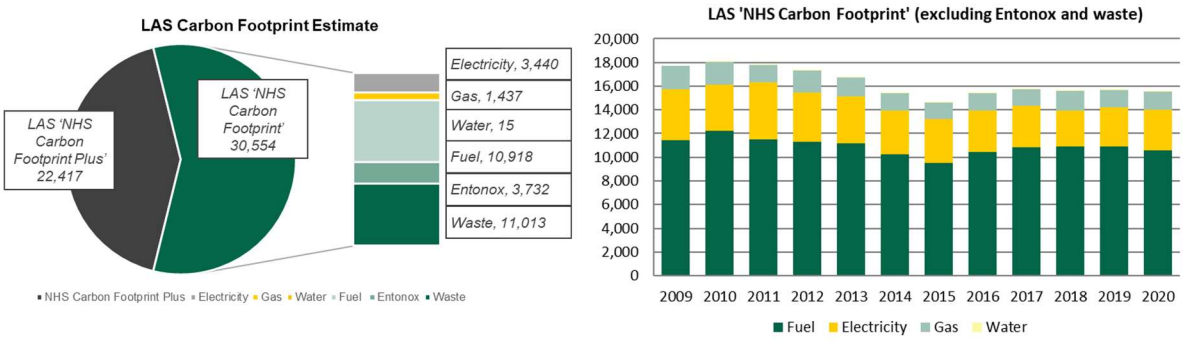

Figure 4: LAS Carbon Footprint Estimate (values displayed represent annual tonnes of carbon) (left) and LAS directly-controlled carbon emissions since 2009 (excluding data for Entonox-related emissions which are only available for a single year, and waste which is only available since 2018)

Although the volume of emissions fell in the early 2010s, the LAS Carbon Footprint has remained consistent at around 19,000 tonnes of carbon emissions for much of the last 4 years.

2.3.1.1. *NHS Carbon Footprint: Medical gases*

The LAS emissions generated from the use of medical gases are *not* included in *Figure 4.* as consumption data for LAS Entonox is *not* available for comparison from 2009.

A national baselining of ambulance sector Entonox use in 2020 evidenced that LAS generated c.3,371 tonnes of carbon emissions from the use of Entonox gas in that year. This represents the highest level of emissions from Entonox gas of any of the UK ambulance services that responded to the baselining exercise. It also represents the second highest use of Entonox gas per face-to-face (F2F) contact, at 11.7 litres per contact, against a UK average of 9.

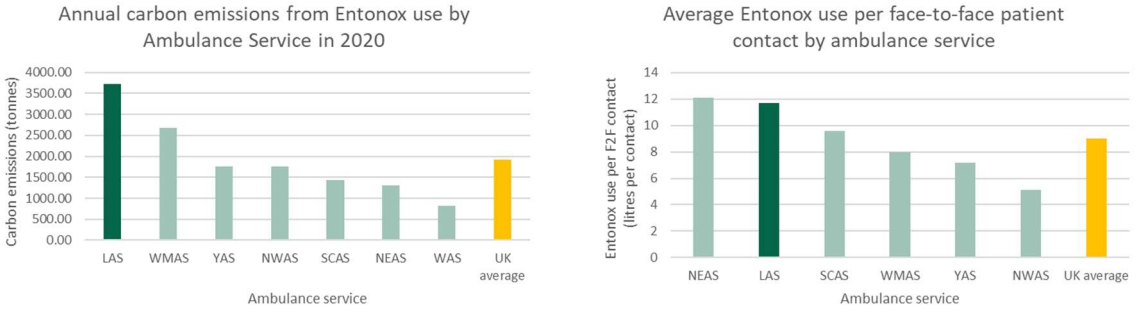

Figure 5: Annual carbon emissions from Entonox use by ambulance service in 2020 (left) and average Entonox use per face-to-face patient contact by ambulance service (right)

2.3.1.2. *NHS Carbon Footprint: Waste*

In addition to the emissions that are generated by fuel, electricity, gas, water and Entonox, the NHS Carbon Footprint also captures the emissions that are generated from waste.

According to the waste hierarchy, organisations should first prevent and re-use products to avoid the generation of waste altogether. Where this is not possible, and waste is generated, it is most preferable to recycle, then to burn and recover the energy. The least environmentally preferable methods of waste disposal are incineration and disposal at landfill.

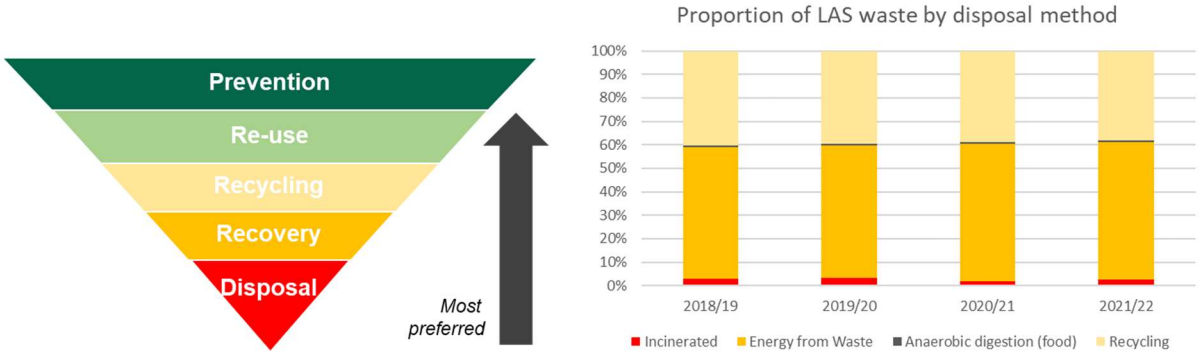

Figure 6: Waste hierarchy (left) and proportion of LAS waste by disposal method (right)

LAS waste data shows that the proportion of waste that is burned for energy recovery and recycled, has remained constant at around 57% and 40%. This accounts for the majority of our waste.

Clinical sharps cannot currently be burned for energy recovery or recycled, and must instead be incinerated. On average this accounts for 3% of total LAS waste, but accounts for 100% of our waste-based carbon emissions. In the two years before the pandemic, the volumes of clinical sharps waste that were incinerated were 47,900Kgs (2018) and 48,730Kgs (2019), but this fell in 2020 to 26,600Kgs.

2.3.2. NHS Carbon Footprint Plus

There is not currently a tool that can reliably calculate the *NHS Carbon Footprint Plus*, and this makes it difficult to fully understand the wider drivers of LAS emissions, and how these compare to ambulance service peers.

Alternative tools like the Higher Education Supply-Chain Emissions Tool (HESCET), which have been designed to calculate the emissions of organisations in other sectors, estimate that the size of LAS scope 3 emissions is equivalent to 22,500 tonnes of carbon emissions each year. Although the tool can generate a high-level overall emissions estimate, the categorisation of emissions by driver has limitations for LAS due to its design for another sector, and because of this, emissions related to medical equipment and medical gases appear understated.

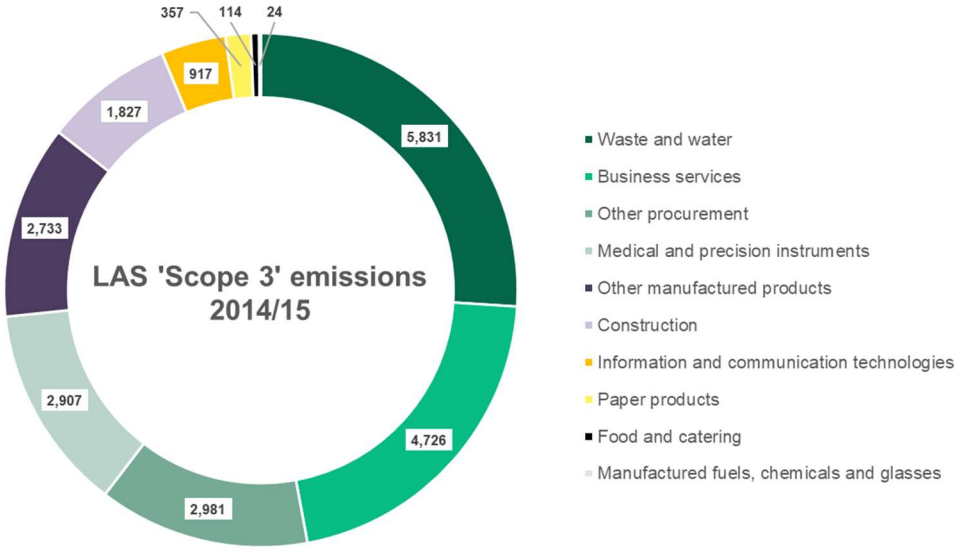

Figure 7: Scope 3 emission estimates for LAS based on 2014/15 data (data points describe the tonnes of carbon emissions per year from each emissions category)

As the LAS Carbon Neutral Plan is updated on an annual basis, latest environmental sustainability baselining tools should be reviewed to ensure that the drivers of scope 3 emissions (the NHS Carbon Footprint Plus) are better understood and to ensure that activities are prioritised on the areas where they will have the biggest impact.

2.4. National policy and contractual requirements for a Green Plan

In October 2020, NHSE/I published '*Delivering a 'Net Zero' NHS'*, the headline national guidance for environmental sustainability across the NHS which sets out two headline commitments for all NHS organisations to be:

- Net zero for the emissions that they directly control by 2040, with an interim target of an 80% reduction by 2028-32; and
- Net zero for the emissions that they can influence by 2045, with an interim target of an 80% reduction by 2036-39.

Alongside the publication of Delivering a Net Zero NHS, new environmental sustainability clauses were introduced to the NHS standard contract which require all NHS organisations to have a Board-approved green plan setting out the steps that the organisation will take to move towards national net zero targets over a three-year time horizon.

In addition to these NHSE publications and contractual changes, a number of additional national documents frame the requirements of the LAS Carbon Neutral Plan. These are listed below, and summarised in *Appendix B*.

National Legislation	National Publications	NHS Publications
• Environmental Protection Act (1990) • Civil Contingencies Act (2004) • Climate Change Act (2008) • Public Sector (Social Value) Act (2012) • UK Emissions Trading Scheme (UK ETS) (2021)	• The Stern Review 2006: The Economics of Climate Change (2006) • Sustainable Procurement: Government Buying Standards (GBS) (2012) • Health Protection Agency: Health Effects of Climate Change in UK (2012) • Clean Growth Strategy (2017) • A Green Future: Our 25 Year Plan to Improve (2018) • UK Climate Emergency (2019) • Net Zero: The UK's contribution to stopping global warming (2019) Government's Covid-19 Recovery Strategy (2020)	• NHS Carbon Reduction Strategy (2009) • The Marmot Review (2010) • The Carter Review (2016) • The Naylor Review (2017) • Public Health Outcomes Framework (2019) • NHS Long Term Plan (2019) • Delivering a Net Zero NHS (2020) • NHS Standard Contract (2020/21)

Figure 8: National documents framing the requirements of the LAS Carbon Neutral Plan

2.5. London Mayor requirements to improve environmental sustainability

Within the Capital, air pollution is one of the most significant challenges affecting the health of all Londoners. Every year in London, 9,400 premature deaths are attributed to poor air quality at a cost of £1.4-3.7bn a year to the NHS.

Road transport is the biggest source of the emissions damaging health in London. Around half of the emissions of oxides of nitrogen which contribute to illegal levels of nitrogen dioxide and particulate matter come from transport. These pollutants make chronic illnesses worse, shorten life expectancy and can damage lung development.

In 2019, Transport for London (TfL) introduced the Ultra-Low Emissions Zone (ULEZ) within the congestion charging zone to help improve air quality in central London. During the implementation of the ULEZ, TfL agreed to waive the ULEZ daily charges and Penalty Charge Notices for LAS vehicles to enable emergency vehicles to enter the charging zone, until October 2023.

In October 2021, the ULEZ zone expanded to cover a larger footprint which includes all roads up to the North and South Circular, impacting a much larger proportion of the fleet.

LAS compliance with Ultra-Low Emissions Vehicles (ULEV) is currently at 69% for double-crewed ambulances (DCAs) and 59% for the remaining fleet. This falls behind the performance of other blue light services across the Capital, where Metropolitan Police Service compliance for emergency response, protection and general purpose vehicles was 71%, 85% and 98% respectively in 2019[10]. LAS will face increasing levels of fines if non-compliant vehicles continue to operate in the ULEZ, starting with a £2.6m fine for 2023/24 and rising to £19.3m in 25/26 for the entire non-compliant fleet.

A revised emissions strategy is expected from the Greater London Authority in late 2021 which accelerates the roadmap to the Zero Emission Zone (ZEZ) to accelerate delivery of the 2018 Mayor's Transport Strategy, and to support the Mayor of London's 2021 manifesto ambition for London to be carbon net zero by 2030. Based on current information, the Zero Emission Zone is expected to start to impact LAS from 2025.

[10] London Assembly (2019) 'Questions to the Mayor: London Ambulance Service, Met Police and London Fire Brigade'

2.6. Our requirement to adapt to a changing climate

Our plan must also consider the risks that the changing climate presents to our operations. In the past ten years, we have experienced extreme weather across the Capital including heatwaves and temporary flooding, and these events have required us to work differently both in the way that we provide our services, and the way that we work with health and care partners.

The LAS HART team undergoes specialist emergency training for many disciplines including rescuing in swift water and flood environments, and as part of our mutual aid agreement with other ambulance services, we may also be required to deploy resources to other parts of the country to assist with the response to extreme environmental events when they occur elsewhere. LAS must continue to ensure that it is well equipped to deal with extreme environmental events as they increase in frequency and severity.

LAS must also consider the changes that may be needed to its assets and infrastructure to ensure resilience in the face of a changing climate, including extremes of temperature and adverse weather events. Modelling by Climate Central forecasts that much of central London is at risk of flooding by 2030 (see *Figure 9*) and the locations most at risk include many of our central London premises.

LAS plans for the adaptations that are required to ensure that environmental changes do not affect our ability to deliver a world class service will be captured as a guiding principle that shapes the *LAS Estates Strategy* (currently in development and scheduled for review by the London Ambulance Service NHS Trust Board in Summer 2022).

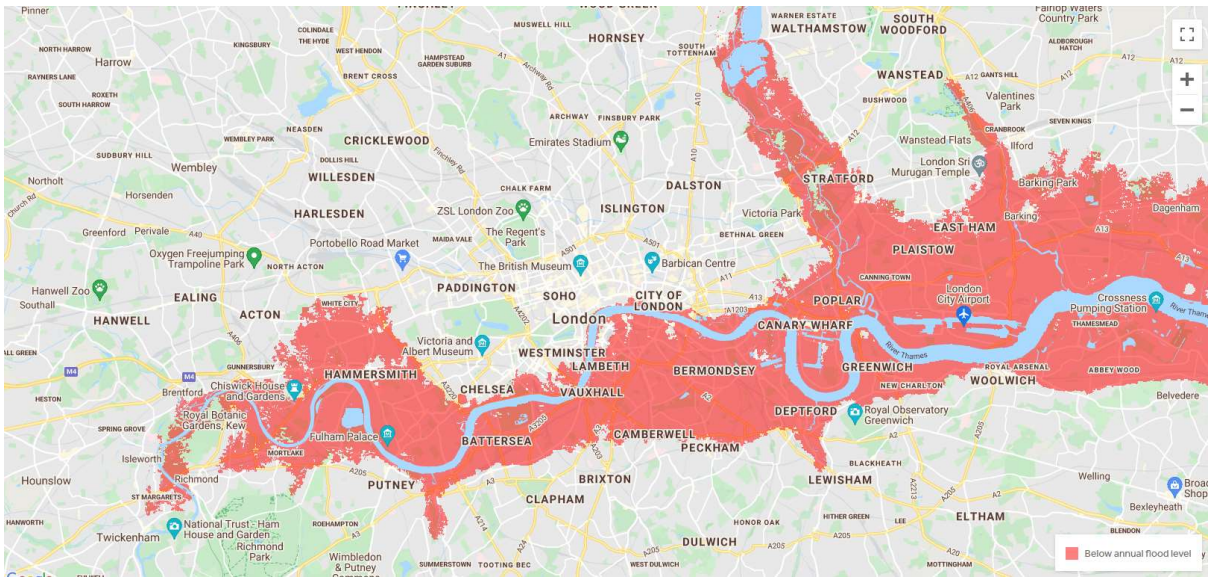

Figure 9: Areas of London forecast to be at high risk of flooding by 2030, from Climate Central

3. Delivering a Greener LAS

LAS recognises the need to go further and faster in reducing the negative environmental impacts of its services to reduce the health impacts of the climate emergency, and to meet both the ULEZ targets of the Greater London Authority, as well as the net zero and interim targets set by NHSE/I through 'Delivering a Net Zero NHS'.

The achievement of a net zero LAS will require co-ordinated and sustained activities over the next 20 years. Large-scale multi-year changes, like estates improvements and the transition to a zero emission fleet, will be crucial, as will the continued commitments from staff to adopt changes in behaviour that reduce waste and promote ways of commuting and working that have a lower environmental impact. *Figure 10* describes the sources of LAS direct emissions, and the actions that are required to reach carbon net zero. *Figure 11* describes the timeline and critical milestones that must be met in order to ensure that yearly progress is sufficient to meet the overall net zero targets in 2040 and 2045.

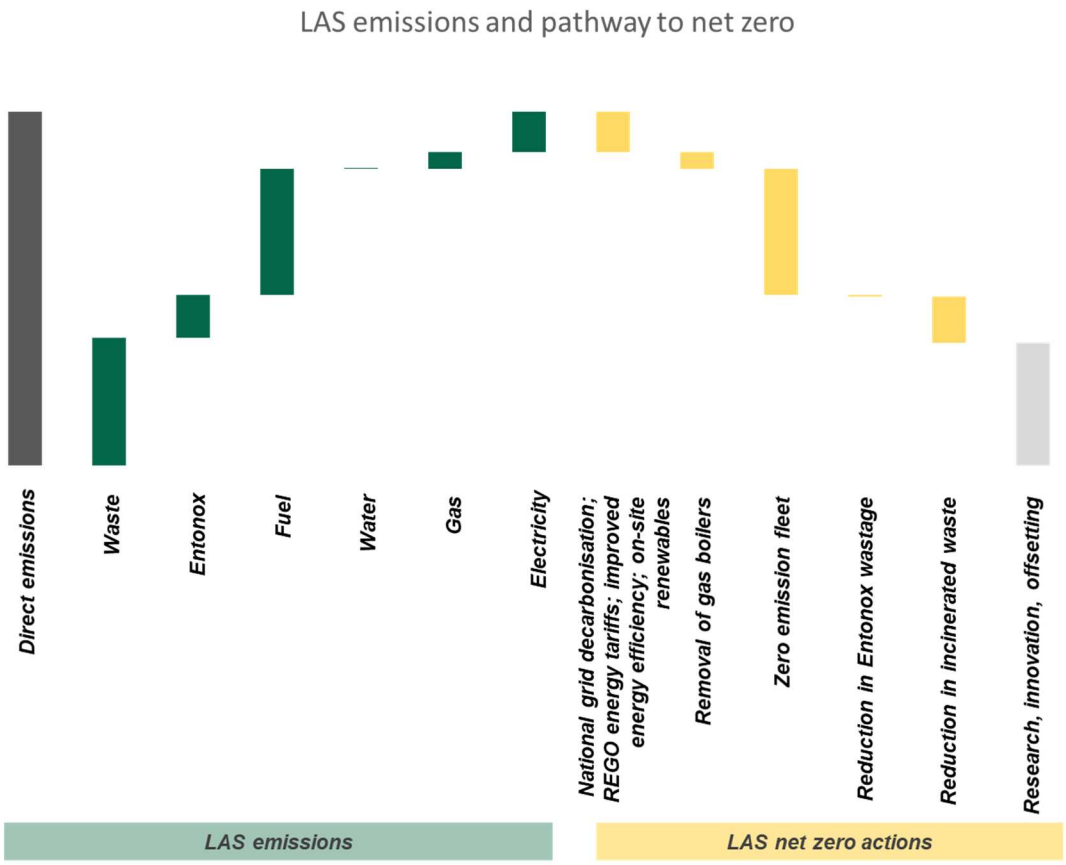

Figure 10: Sources of LAS emissions and actions required to reach net zero

The most significant reduction in LAS carbon emissions will come from the transition from a fuel-based fleet to a zero-emissions fleet. To meet the interim target of an 80% reduction in emissions by 2032, LAS must begin procuring zero emissions vans, Non-Emergency Transport Service (NETS) and support vehicles from 2022, and zero emissions double-crewed ambulances (DCAs) and blue-light cars from 2024 at the latest, based on a replacement cycle of 10 and 7-years, for each group of vehicles, respectively.

Achievement of the interim and overall net zero targets will also require LAS to remove all gas boilers and replace them with electric or renewable alternatives by 2032. A transition away from gas boilers will require the energy efficiency of the existing estate, and building fabric, to first be upgraded to reduce energy wastage, thereby making the transition more affordable and reducing pay-back periods.

There is not yet sufficient technology to mitigate the majority of emissions that relate to Entonox and the incineration of clinical sharps. National guidance suggests that where this is the case, residual emissions should be bridged by research and innovation, and where this does not deliver results, to consider offsetting and mechanisms to secure negative emissions. This is reflected by the grey 'Research, Innovation and Offsetting' bar in *Figure 10*, and by the initiatives relating to supplier engagement in *Appendix A*. It is the expectation of this plan that the size of the LAS footprint requiring research, innovation and off-setting will reduce in future annual refreshes of this plan as uncertainty is replaced by technological innovations.

It is not yet possible to create a pathway to net zero for the wider LAS carbon footprint (the '*NHS Carbon Footprint Plus*') as there is currently insufficient data to model a realistic baseline. *Appendix A* describes the initiatives that will be delivered to collect supplier and staff commuting emissions data over the next 3 years. This will enable a pathway to net zero for the LAS wider carbon footprint to be modelled by 2025.

Delivery of the pathway to net zero will require a number of critical milestones to be met over the next decade. These critical milestones are described in *Figure 11* below.

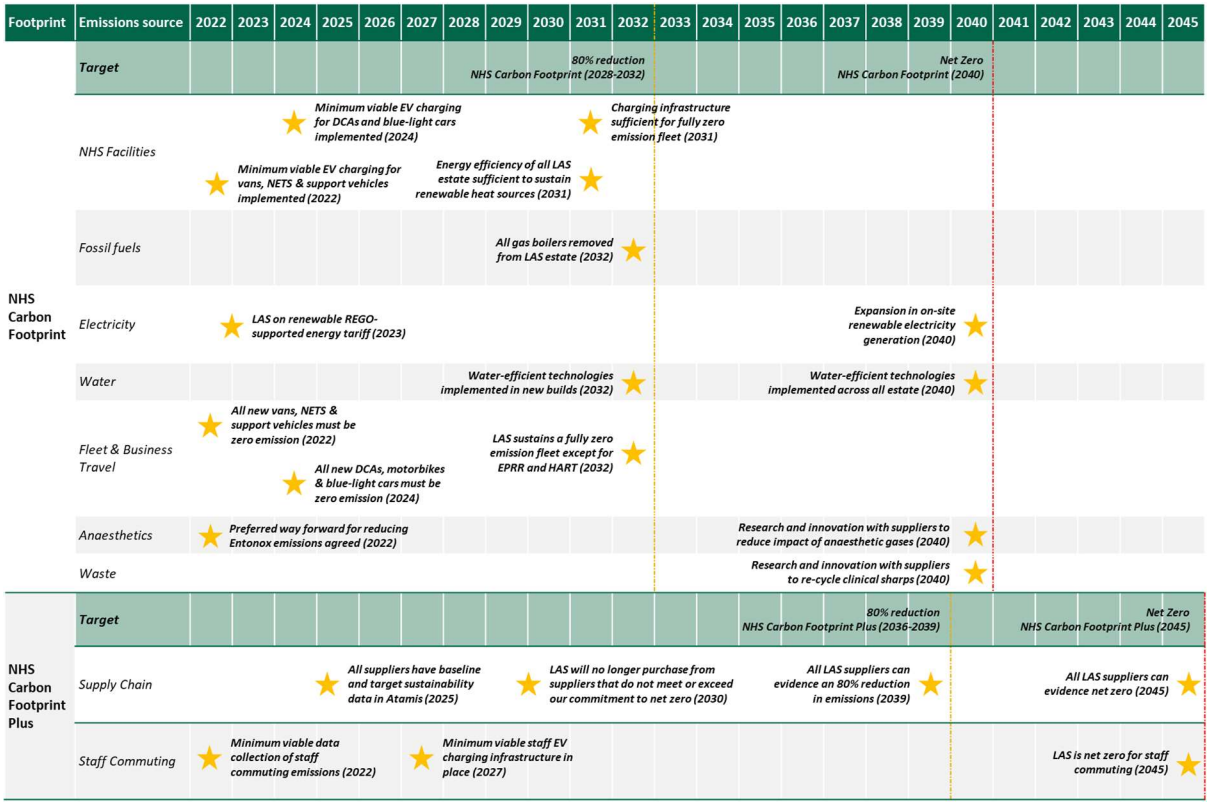

Figure 11: Critical milestones for achieving LAS carbon net zero, and interim targets

3.1. Areas of focus

The overall vision, priorities and actions that are required to deliver net zero for LAS are broken down by this plan into six areas of focus, as illustrated below:

Figure 12: The six areas of the LAS Carbon Neutral Plan

Appendix C shows the alignment of the six LAS areas of focus, with the areas that are described in the NHSE/I '*How to produce a Green Plan*' national guidance.

Each of the six areas of focus address different components of the LAS carbon footprint. The heat map in *Figure 13* below illustrates the impact that each of the areas of focus will have on different emissions sources within the *NHS Carbon Footprint* and *NHS Carbon Footprint Plus*. The heat map demonstrates that achievement of net zero will require all areas of LAS to contribute to the reduction in emissions in their own way.

Key:
++ Major impact
\+ Minor impact

	NHS Carbon Footprint										NHS Carbon Footprint Plus										
LAS Green Plan Summary	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Clinical Operations	+		++	+		+		+		n/a	+	+			+		n/a				+
Estates, Facilities & Utilities	++	++			++			++	+	n/a				++			n/a				
Fleet & Transport	++			++		++	++			n/a							n/a	+		+	
Procurement & Supply Chain	+			+		+	+	+		n/a	++	++	++	++	++	++	n/a	++	++		
Digital	+	+		+	+	+	+	+	+	n/a	+	+	+	+	+	+	n/a	+	+	+	+
People, Culture & Communications	+	+	+	+	+	+	+	+	+	n/a	+	+	+	+	+	+	n/a	+	+	+	+
LAS Green Plan	++	++	++	++	++	++	++	++	+	n/a	++	++	++	++	++	++	n/a	++	++	+	+

Figure 13: Heat map illustrating the impact of the different areas of focus on each emissions source

The remainder of this chapter covers each of the six areas of focus, in turn. For each area, the Carbon Neutral Plan articulates the sustainability priorities which will reduce the associated emissions of that area, and contribute to the impacts that are described in the heat map above. A list of sustainability achievements for each area of focus will also recognise the initial steps that have already been taken to reduce emissions in recent years. *Appendix A* provides a more detailed list of specific initiatives that will form the delivery plan of this document.

3.2. Clinical operations

The 'Delivering a Net Zero NHS' publication sets out the need for clinical operations to become more environmentally sustainable. According to data in the report, 25% of NHS emissions are generated by medicines, and in particular from anaesthetic gases. Capturing and destroying nitrous oxide could cut over one-third of NHS anaesthetic emissions, and deliver a 75% reduction in nitrous emissions.

The publication also reinforces the case that is made in the NHS Long Term Plan for delivering more sustainable, digitally-enabled models of care that are closer to home. Optimising the location of care ensures that patients interact with the service in the most appropriate setting, and this not only creates benefits for patient experience, but in many cases, may also reduce emissions related to unnecessary hospital visits and admissions.

Responding to the opportunities identified by national guidance, we will focus action to improve the sustainability of our clinical operations in four main areas, described below:

#	Priority Net Zero Area	Description
1	**Reducing the number of journeys to deliver care, where clinically appropriate**	Using remote interventions to reduce overall journeys, and reviewing operational procedures to reduce secondary journeys and multiple attendance ratios, where clinically appropriate.
2	**Reducing the environmental impact of anaesthetic gases**	Exploring options to reduce emissions and waste relating to the use and disposal of medical gases, where clinically appropriate.
3	**Reducing volumes of clinical waste**	Reducing the generation of clinical waste, where possible, and disposing of clinical waste higher up the waste hierarchy when it is generated.
4	**Ensuring our people are equipped to respond to the challenges of a changing climate**	Adapting clinical training to ensure that staff and volunteers are equipped to respond to patients affected by extremes of weather (e.g. heatwaves, floods etc.)

A detailed list of clinical operations sustainability actions and initiatives aligned to the four priority areas listed above is provided in *Appendix A.1*.

3.2.1. Achievements to date and in progress

Although there has not been a dedicated LAS sustainability programme, a number of improvements have delivered environmental benefits in recent years. Some recent examples include:

- **Increasing Hear & Treat** – the proportion of LAS patients having a Hear & Treat outcome has increased from c. 6% in 2018 to above 10% in 2020, and this increase in remote activity will have reduced the emissions that would otherwise have occurred from delivering a face-to-face service
- **Stroke video testing** – the testing of video conferencing with stroke physicians in NCL helped to ensure that patients received the right care in the right place, and this will likely have had a positive impact on the emissions that would otherwise have occurred from avoidable secondary transfers
- **Control room video functionality** – introducing video conferencing functionality into both control rooms through the GoodSAM app supports hear and treat, and decision-making for critical care resource dispatch
- **Controlled drugs (CD) supply chain** – by relocating the Trust's CD supply from Frimley to Lewisham, we will be reducing the distance of distributing medicines to stations
- **Medicines packing model** – by reducing the operating hours of the medicines packing unit from being a 24-hour service to running from 6am-10pm, we expect that we will reduce electricity consumption to light and heat the medicines packing unit throughout the night
- **Reduction in ATP swabbing** – previously hundreds of swabs per week were taken from ambulance vehicles, however following a quality review, the vehicle prep team have been instructed to cease this practice which uses non-biodegradable components.

3.3. Estates, facilities and utilities

The NHS estate and its supporting facilities services – including primary care, trust estates and private finance initiatives – comprises 15% of the total NHS carbon emissions profile.

The 'Delivering a Net Zero NHS' report highlights significant opportunities for emissions reductions in these areas, with an emphasis on energy use in buildings, waste and water, and new sources of heating and power generation.

To ensure alignment with the best practice and guidance from the Greener NHS national programme, we will focus sustainability initiatives in the following areas of our estate, facilities and utilities:

#	Priority Net Zero Area	Description
1	**Improving the sustainability of our estate**	Ensuring that all new buildings and major redevelopments are BREEAM Excellent, and all major refurbishments meet BREEAM Very Good. Using construction and engineering solutions to upgrade existing buildings by, for example, supporting a switch to LED lighting, and upgrading heating, cooling, building fabric, insulation, ventilation and hot water. This includes a specific requirement to eliminate gas boilers across our estate by 2032 at the latest.
2	**Switching to 100% renewable sources of energy**	Transitioning to a renewable energy tariff, and investing in on-site renewable energy generation.
3	**Improving our waste sustainability**	Reducing the generation of waste, where possible, and disposing of waste higher up the waste hierarchy when it is generated.

A detailed list of estates, facilities and utilities sustainability actions and initiatives aligned to the three priority areas listed above is provided in *Appendix A.2*.

3.3.1. Achievements to date

Although there has not historically been a dedicated sustainability programme, the Trust has made progress in becoming more environmentally sustainable in recent years, with particular highlights including:

- **Sustainability in new builds** – the new Logistics Support Unit and Medicines Packing Unit have been designed according to BREEAM 'excellent' standards and include features such as recycled tarmac, photovoltaic panels, electric vehicle charging points, rainwater harvesting, new trees, wetland, and bee hives to enhance the biodiversity of the site.
- **Building Management Systems** – Building Management Systems have been installed across new facilities, which will enable the remote management of heating, ventilation and air conditioning in the future
- **LED lighting** – LED lights and motion sensors have been fitted during recent building upgrades
- **Water efficiency** – as part of renovation works, push taps and low-flow toilets have been installed to reduce water use and wastage
- **Consolidation of office space** – by introducing a hot-desk system and stacking plan at our Headquarters, we have been able to consolidate our corporate office space which has reduced the requirement to heat, light and cool addition premises.
- **Zero waste to landfill** – through supplier changes and engagement we no longer send waste to landfill. Instead, the majority of waste is sent for energy recovery (55%) and recycling (40%)
- **Recycling** – for many years, a system has been in place for recycling paper, card, plastics, batteries, and in some buildings food; with posters to encourage and educate staff.

3.4. Fleet and staff transport

Approximately 3.5% (9.5 billion miles) of all road travel in England relates to patients, visitors, staff and suppliers to the NHS, contributing around 14% of the system's total emissions. This includes approximately 4% for business travel and fleet transport, 5% for patient travel, 4% for staff commutes and 1% for visitor travel.

As an ambulance service, the proportion of emissions relating to our fleet is enormous. Each year, we generate over 10,500 tonnes of carbon emissions from over four million litres of diesel fuel, and this represents over 55% of our overall NHS Carbon Footprint emissions.

Successfully transitioning to a zero-emissions fleet of vehicles, is fundamental to ensuring the delivery of our net zero objectives. In recognition of the requirement to move quickly to a zero-emissions fleet, and to support staff with their own green choices for commuting, the LAS Carbon Neutral Plan will focus sustainability activity across the following areas of our fleet and transport:

#	Priority Net Zero Area	Description
1	**Ensuring ULEZ compliance**	Transitioning our remaining non-compliant fleet to a fully ULEZ-compliant fleet by October 2023 to meet the deadline set by the Greater London Authority
2	**Transitioning to, and sustaining, a zero emission fleet**	Delivering front-line, support and corporate services from a zero-emissions fleet, and establishing the supporting infrastructure required to sustain this.
3	**Supporting staff to make greener commuting choices**	Supporting staff to adopt greener methods of commuting by, for example, ensuring that sufficient showers, bike racks and lockers are in place, and through the provision of EV charge points for the personal vehicles of our staff.

A detailed list of fleet and staff transport sustainability actions and initiatives aligned to the three priority areas listed above is provided in *Appendix A.3*.

3.4.1. Achievements to date

Environmental sustainability has been a fundamental driver for LAS fleet modernisation over the last 3 years. Significant initiatives and benefits delivered over recent years include:

- **Project Zerro and Next Generation Ambulance** – through Project Zerro we are developing one of the first ever hydrogen-range-extended electric double-crewed ambulances (eDCA), and through the Next Generation Ambulance project we are working with national partners to enable the national procurement of eDCAs from 2022.
- **ULEZ compliance** – 68% of the Trust's front-line DCAs, and 59% of the remaining fleet, are currently ULEZ compliant
- **Electric vehicles** – the first fully-electric vehicles (Nissan Leafs) have been used in our supporting fleet and maternity fleet since 2018/19
- **Hybrid vehicles –** hybrid vehicles are used in our resuscitation and logistics fleet to deliver front-line and support services

3.5. Procurement and Supply Chain

'Delivering a Net Zero NHS' makes a strong case for the role that procurement and the supply chain must play in reducing NHS organisations' carbon footprints in three main areas: more efficient use of supplies; low-carbon substitutes and product innovation; and by ensuring suppliers are decarbonising their own processes.

To ensure that all NHS organisations are able to meet the target of (carbon) net zero by 2045, headline national guidance sets out a commitment that 'before the end of the decade, the NHS will no longer purchase from suppliers that do not meet or exceed NHS net zero commitments.' [11]

The NHS Supply Chain is also making positive steps towards supporting sustainability, with a mandatory 'social value' weighting of 10% across all NHS procurements, coming into force in April 2022[12]. This will increase the focus on sustainability and decarbonisation across the procurement of all goods and services.

To ensure alignment with national guidance, and to realise the opportunities identified by sector best practice, we will improve the sustainability of our procurement practices and supply chain in three main areas:

#	Priority Net Zero Area	Description
1	**Encouraging decarbonisation of suppliers**	Updating LAS procurement practices to recognise and reward sustainable suppliers.
2	**Supporting product or service innovation**	Identifying common products or services that have the largest sustainability improvement opportunities (for instance, relating to a reduction in single-use plastics), and engaging with suppliers to innovate and develop greener alternatives.
3	**More efficient distribution and use of supplies**	Ensuring that supplies are distributed and used across the organisation in a way that reduces waste, and reduces emissions.

A detailed list of procurement and supply chain sustainability actions and initiatives aligned to the three priority areas listed above is provided in *Appendix A.4*.

3.5.1. Achievements to date

The LAS procurement department have a Sustainability Lead, as well as a Sustainable Procurement Policy, which has enabled sustainable procurement initiatives and achievements to be realised in recent years, including:

- **Plastic reduction in HQ** – Eliminating single-use plastic cups, cutlery and coffee stirrers in our Waterloo Headquarters
- **New Logistics Support Unit (LSU)** – the establishment of a centralised and larger LSU will enable LAS to procure and store a larger supply of equipment and consumables and this will enable a reduction in the frequency of deliveries that is required
- **Redistribution of stock** – the Trust works closely with NHS Supply Chain and local NHS partners, identifying where surplus stock or items approaching expiry dates can be redistributed within the wider health and care system.

[11] Delivering a Net Zero NHS (2020) www.england.nhs.uk/greenernhs/a-net-zero-nhs/

[12] NHS Social Value Guidance https://nhsprocurement.org.uk/mandatory-social-value-weighting-of-10-for-all-nhs-procurement/

3.6. Digital

Several national publications make the case for the role that digital must play in delivering net zero, including: the NHSE/I '*Delivering a Net Zero NHS*' publication, NHSX's '*What Good Looks Like*' guidance, and the UK Government '*Sustainable ICT and Digital Services Strategy (2020 to 2025)*'.

To ensure alignment with national guidance, and to realise the opportunities identified by sector best practice, we will use digital to deliver our net zero objectives in three areas:

#	Priority Net Zero Area	Description
1	**Using digital as a sustainability enabler**	Digital technologies, like video functionality or supporting applications which enable increased remote functionality, are an important enabler to reduce emissions related to avoidable staff journeys.
2	**Improving the environmental sustainability of IM&T operations**	Initiatives which reduce the electricity consumption of our IM&T infrastructure and reduce waste are necessary to deliver a sustainable IM&T department.
3	**Collecting and using sustainability data**	We will begin collecting and analysing sustainability data to support evidence-based decision-making around future sustainability initiatives.

A detailed list of digital sustainability actions and initiatives aligned to the three priority areas listed above is provided in *Appendix A.5*.

3.6.1. Achievements to date

Although there has not been a dedicated digital sustainability programme, a number of recent projects have delivered significant environmental benefits for LAS. Some recent examples include:

- **Mobilising remote working** – in response to the pandemic, corporate staff were provided with laptops and the supporting IT infrastructure to enable home-working. This resulted in a reduction in emissions related to staff commuting, and a reduction in office waste.
- **Rolling out Electronic Patient Care Records (ePCR)** – in April 2021, we rolled out iPads and ePCR to front-line clinicians to enable remote access to read and record patient data, and this reduced the requirements to continue using paper reports.
- **Beginning the migration to the cloud** – LAS have migrated to NHS secure O365 to exploit cloud storage and this has started the consolidation of energy-intensive, LAS-hosted data centres.

3.7. People, culture and communications

Staff engagement is a crucial enabler for the successful delivery of the LAS Carbon Neutral Plan and to ensure that LAS can meet its net zero objectives. All staff have a role to play in making sustainable choices and living out sustainable behaviours.

Learning from good practice in other organisations, we will deliver a number of sustainability initiatives across three priority areas covering our Communications, and People & Culture Directorates:

#	Priority Net Zero Area	Description
1	**Raising awareness of sustainability**	Using communications channels to raise awareness of sustainability drivers and initiatives across the organisation and with external partners
2	**Supporting behavioural change**	Encouraging LAS people to adopt more sustainable behaviours and get involved with sustainability initiatives
3	**Enabling sustainability through our corporate operations and processes**	Reducing the environmental impact of our corporate operations and processes by supporting staff to work remotely, where possible, and reducing the generation of waste.

A detailed list of people, culture and communications sustainability actions and initiatives aligned to the three priority areas listed above is provided in *Appendix A.6*.

3.7.1. Achievements to date

Despite not having an overarching sustainability programme across the Trust, many staff are enthusiastic and passionate about reducing our negative environmental impact. A number of recent initiatives and achievements have been delivered from both the self-organisation of motivated individuals, and central teams, including:

- **Staff led recycling** – a scheme for recycling crisp packets was recently introduced by a member of staff, which is additional to the Trust-managed recycling infrastructure
- **'Go Walk' campaign** – the Trust ran a campaign encouraging staff to get active (drive less, walk more) by providing free pedometers and running a step counting competition
- **Staff gardens** – the Communications team run an annual competition to encourage staff to look after the green spaces within their stations

4. Ensuring delivery of the LAS Carbon Neutral Plan

Delivery of our net zero objectives requires sustained and co-ordinated activity across the whole of the LAS over the next 20 years. Regular monitoring and reporting on delivery progress will be crucial to ensure that yearly progress is sufficient for the achievement of objectives that are decades into the future.

4.1. Monitoring and Reporting on Sustainability Progress

Historically, LAS has not had an organisation-wide forum to review sustainability initiatives, co-ordinate activities and monitor progress. Governance for the delivery of the Carbon Neutral Plan will be agreed following the guidance arising from the Good Governance Institute audit being carried out in winter 2021.

The governance structure for sustainability will provide assurance on the implementation of sustainability initiatives and organisational progress against net zero targets through to Trust Board via the Executive Committee. Rather than establishing a new and separate committee, it is likely that the governance for sustainability reporting will be captured within the terms of reference of an existing LAS committee.

Figure 14: Sustainability Governance (which will be informed by the recommendations of the Good Governance Institute audit)

4.2. Trust Board-level accountability for sustainability

The Chief Financial Officer will be the Board-level Sustainability Lead for the London Ambulance Service, and will be ultimately accountable for the successful delivery of the LAS Carbon Neutral Plan and achievement of net zero objectives.

4.3. Building sustainability capability and capacity

The development of the LAS Carbon Neutral Plan has identified many examples where specialist sustainability expertise would be value-adding, and where dedicated sustainability delivery resource could bridge the gap across initiatives that span multiple directorates. This includes:

- Contributing expertise to support the modelling of an emissions trajectory based off of agreed Carbon Neutral Plan initiatives;
- Understanding opportunities to use more sustainable products across our operations; and
- Supporting the technical evaluation of supplier sustainability responses to ITTs.

Without specialist expertise and dedicated delivery support, there is a risk that initiatives may not be delivered and that the sustainability benefits of the Carbon Neutral Plan will not be fully realised.

In recognition of this risk, and to improve our capability and capacity to successfully deliver the Carbon Neutral Plan, we will establish and recruit to a Sustainability Manager post. The Sustainability Manager will be responsible for:

- Leading the annual updating of the Carbon Neutral Plan and sustainability section of the Annual Report;
- Collecting and submitting quarterly Greener NHS data returns;
- Providing expertise and delivery capacity for a number of Carbon Neutral Plan initiatives;
- Mobilising and co-ordinating a network of eco-champions;
- Inputting into sustainability funding applications;
- Reviewing and monitoring changing legislation and compliance requirements;
- Networking with green leads in London and across the ambulance sector; and
- Leading on sustainability engagement with internal and external stakeholders.

4.4. Funding approach to deliver the LAS Carbon Neutral Plan

To fully deliver the LAS Carbon Neutral Plan and meet net zero targets, significant capital investment must be made to upgrade and transform the LAS estate and fleet. For example, the cost of decarbonising our DCA fleet is likely to be in excess of £86.8m. The investment required to decarbonise our estate will emerge as the Estates Strategy is developed during 2022. This scale of transformation will require multi-year financial commitment to prioritise sustainability improvements across the next decade.

Investment decisions for large capital projects will be planned and assessed through the Trust's usual business case and business planning processes. As part of this, the feasibility and affordability of projects will be assessed. A number of initial business cases for the LAS Carbon Neutral Plan have been identified in the initiatives listed in *Appendix A*. These business cases will be written over the next 18 months, and predominantly relate to fleet replacement, energy efficiency and building fabric upgrades.

Successful approval and delivery of the business cases will be dependent upon the availability of sufficient capital. To deliver at the pace that is required, LAS will need to bid for capital from external funding schemes as internally-generated capital funding will not be sufficient to fully deliver the Carbon Neutral Plan alone.

A number of sustainability-focussed funding schemes have been established in recent years to support organisations, like the LAS, in decarbonising. The largest of these funds is the Public Sector Decarbonisation Scheme which has allocated £280m in the first two phases of funding, and which will make a further £1.425bn investment to public sector bodies through to 2025[13].

LAS will establish a Sustainability Manager post (as described in *Section 4.3*) to create additional capacity and capability to develop high-quality and compelling bids for funding from sources like the Public Sector Decarbonisation Scheme. The Sustainability Manager will work closely with colleagues from the Finance Directorate, and other relevant areas of LAS (for instance, Strategic Assets and Property) to co-develop bid submissions, and this will enable Carbon Neutral Plan delivery at the pace that is required.

[13] DHSC '*COP26 and the NHS: Sajid Javid's open letter to all NHS trusts in England*' at https://www.gov.uk/government/publications/open-letter-to-nhs-trusts-on-net-zero-commitment/cop26-and-the-nhs-sajid-javids-open-letter-to-all-nhs-trusts-in-england

4.5. Risks to delivering the LAS Carbon Neutral Plan

The table below sets out the major risks, and proposed mitigations, for the full delivery of the LAS Carbon Neutral Plan.

#	Risk	Proposed mitigations
1	There is a risk that there will be insufficient capital to deliver the Carbon Neutral Plan at the pace that is required	• LAS will establish a Sustainability Manager post to create additional capacity and capability, alongside the Finance Directorate, to develop high-quality bid submissions to relevant external funding schemes.
2	There is a risk that there may be insufficient focus on delivering the Carbon Neutral Plan, particularly during periods of high operational pressure	• The Carbon Neutral Plan will be updated on an annual basis and progress will be reported to Trust Board to ensure that the pace of delivery is sufficient to meet net zero targets. • Establishing a Sustainability Manager role will ensure that delivery can be co-ordinated and that there is sufficient focus on sustainability across the organisation.
3	There is a risk that there is insufficient Board-level visibility of sustainability	• Regular progress in delivering the LAS Carbon Neutral Plan will be reported through to Trust Board. The specific governance route will be informed by the recommendations of the Good Governance Institute audit.

5. Conclusion and immediate actions

LAS recognises its responsibility in reducing the carbon emissions and negative environmental impact of its operations. This LAS Carbon Neutral Plan sets out the pathway to a net zero LAS by 2040 for direct emissions and 2045 for the emissions that it can influence.

5.1. Immediate next steps

Upon Trust Board signoff, a number of immediate actions are required to mobilise the delivery of the Carbon Neutral Plan. These include:

- **Sustainability Manager recruitment**: to be actioned as a priority
- **Sustainability Governance mobilisation:** the governance section of the LAS Carbon Neutral Plan will be updated to reflect the recommendations of the Good Governance Institute audit, and associated terms of reference will be updated to include sustainability reporting responsibilities
- **Communications planning:** developing a sustainability communications and engagement plan outlining key messages for 21/22, key stakeholders and the channels through which they are engaged
- **Green Staff Survey:** promoting the Green Staff Survey to all staff before the end of Q4 21/22 to capture baseline data on staff commuting and attitudes towards sustainability
- **Energy tariff options appraisal:** conducting an options appraisal and developing a business case to consider switching energy tariffs to a green / renewable tariff before the renewal date in April 2022.
- **Directorate operational plans:** updating of operational plans by each Directorate to ensure that initiatives and actions described in the relevant areas of Appendix A are captured in Directorate plans

Appendices

The main body of the Delivering a Greener LAS plan is supported by a number of appendices which provide supplementary information. The purpose of each of the appendices is outlined in the table below.

Appendix	Description
Appendix A: LAS Carbon Neutral Plan: List of initiatives and actions	Appendix A lists the detailed actions and initiatives that will be delivered as part of the Carbon Neutral Plan to March 2025. The initiatives are grouped by the six Green Plan Areas of Focus. The actions and initiatives detailed in Appendix A should be included within relevant Directorate operational plans.
Appendix B: National guidance	Appendix B lists the national documents, including legislation, policies and guidance, which frame the need for the LAS Green Plan
Appendix C: LAS Carbon Neutral Plan alignment with national guidance	Appendix C demonstrates the alignment of the LAS Carbon Neutral Plan Areas of Focus with the suggested Green Plan areas of focus described in national guidance

Table 1: Description of appendices contents

A list of detailed actions and initiatives that will be delivered by

Appendix A – LAS Carbon Neutral Plan: List of initiatives and actions

Appendix A provides more granular-level detail of the Carbon Neutral Plan across each of the six areas of focus. Each section follows a similar format which:

- Summarises the sustainability priorities of that focus area;
- Demonstrates the impact each priority will have on the emissions sources within the LAS carbon footprint; and
- Lists a detailed table of initiatives and activities that will be delivered before March 2025.

A.1 Clinical Operations

There are four sustainability priorities for the clinical operations area of the Carbon Neutral Plan.

#	Priority Net Zero Area	Description
1	**Reducing the number of journeys to deliver care, where clinically appropriate**	Using remote interventions to reduce overall journeys, and reviewing operational procedures to reduce secondary journeys and multiple attendance ratios, where clinically appropriate.
2	**Reducing the environmental impact of anaesthetic gases**	Exploring options to reduce emissions and waste relating to the use and disposal of medical gases, where clinically appropriate.
3	**Reducing volumes of clinical waste**	Reducing the generation of clinical waste, where possible, and disposing of clinical waste higher up the waste hierarchy when it is generated.
4	**Ensuring our people are equipped to respond to the challenges of a changing climate**	Adapting clinical training to ensure that staff and volunteers are equipped to respond to patients affected by extremes of weather (e.g. heatwaves, floods etc.)

The Clinical Operations area of the plan will have a major impact on the emissions related to anaesthetic gas use (Entonox), and will have a minor impact on the emissions related to fuel, waste, patient transport, and the supply chain related to medical goods and devices. The relationship between the Clinical Operations sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

Clinical Operations Sustainability Priorities	NHS Carbon Footprint										NHS Carbon Footprint Plus										
	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Priority 1: *Reducing the number of journeys to deliver care, where clinically appropriate*	+			+		+		+													+
Priority 2: *Reducing the environmental impact of anaesthetic gases*			++									+									
Priority 3: *Reducing the volumes of clinical waste*								+			+				+						
Total – Clinical Operations	+		++	+		+		+			+	+			+						+

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the clinical operations sustainability priorities. These initiatives are described in the table overleaf.

Clinical Operations Initiatives

Clinical Operations Priority 1: Reducing journeys to deliver care, where clinically appropriate

#	Initiative title	Description	Year
C1.1	**Reviewing conveyancing procedures**	1. Carry out a review of the response matrix (requirements for each determinant and the vehicles required to attend)	1. Q3 22/23
		2. Update the response matrix, if required, subject to the outcomes of C1.1.1.	2. Q4 22/23
C1.2	**Video functionality**	1. Improving access to 111/999 clinical video assist to reduce overall journeys, where clinically appropriate	1. Q2 22/23
		2. Explore the evidence base for the application of video-assist technology for different clinical specialty interventions	2. Q4 22/23
		3. Testing of potential clinical-specialty video-assist technologies	3. Q2 23/24

Clinical Operations Priority 2: Reducing the environmental impact of anaesthetic gases

#	Initiative title	Description	Year
C2.1	**Understanding use of anaesthetic gases**	1. Carry out a clinical audit of LAS Entonox use (subject to CARU approval for inclusion in work plan)	1. Q2 22/23
		2. Request AACE / NASMED to support national data collection and analysis on Entonox orders against administration to enable robust benchmarking	2. Q2 22/23
C2.2	**Understanding gas wastage**	1. Carry out a review of the operational process for Entonox use and wastage, working with logistics colleagues and medicines management	1. Q2 22/23
		2. Carry out a review of the inventory management of gases	2. Q2 22/23
C2.3	**Investigating alternatives to Entonox**	1. Consider alternatives to Entonox, taking the need for clinical sustainability into account, at the Medicines Management Committee with engagement with consultant paramedics, senior sector clinical leads and assistant medical directors.	1. Q2 22/23
C2.4	**Entonox future planning**	1. Articulate a preferred way forward for reducing emissions related to Entonox for inclusion in the 22/23 Green Plan update	1. Q3 22/23

Clinical Operations Priority 3: Reducing volumes of clinical waste

#	Initiative title	Description	Year
C3.1	**Greener PPE products**	1. Undertake horizon scanning and exploration of new, greener PPE products to report to Sustainability Steering Group	1. Q4 22/23
C3.2	**Reducing medicines wastage**	1. Roll-out automated temperature-controlled drugs bags to increase the cold chain, and reduce the generation of clinical wastage from medicines	1. Q4 23/24

Clinical Operations Priority 4: Ensuring our people are equipped to respond to the challenges of a changing climate

#	Initiative title	Description	Year
C4.1	**Review clinical training**	1. Review clinical training to ensure that our people are appropriately equipped to respond to patients in a changing climate	1. Q4 24/25
C4.2	**Review equipment**	1. Review clinical equipment and adaptations required for a changing climate	1. Q4 24/25
C4.3	**Ongoing climate change monitoring and review**	1. Capture the climate emergency as a BAF risk for ongoing monitoring and review	1. Q1 22/23

A.2 Estates, Facilities and Utilities

There are three sustainability priorities for the estates, facilities and utilities area of the Carbon Neutral Plan.

#	Priority Net Zero Area	Description
		Ensuring that all new buildings and major redevelopments are BREEAM Excellent, and all major refurbishments meet BREEAM Very Good.
1	**Improving the sustainability of our estate**	Using construction and engineering solutions to upgrade existing buildings by, for example, supporting a switch to LED lighting, and upgrading heating, cooling, building fabric, insulation, ventilation and hot water. This includes a specific requirement to eliminate gas boilers across our estate by 2032 at the latest.
2	**Switching to 100% renewable sources of energy**	Transitioning to a renewable energy tariff, and investing in on-site renewable energy generation.
3	**Improving our waste sustainability**	Reducing the generation of waste, where possible, and disposing of waste higher up the waste hierarchy when it is generated.

The estates, facilities and utilities area of the plan will have a major impact on the emissions related to fossil fuels, NHS facilities, electricity, waste and the construction elements of the supply chain. There will also be a minor impact on emissions related to water.

The relationship between the estates, facilities and utilities sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

Estates, Facilities & Utilities Sustainability Priorities	NHS Carbon Footprint										NHS Carbon Footprint Plus									
	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Priority 1: *Improving the sustainability of our estate*	++	++			+				+					++							
Priority 2: *Switching to 100% renewable sources of energy*					++																
Priority 3: *Improving our waste sustainability*								++													
Total – Estates, Facilities & Utilities	++	++			++			++	+					++							

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the estates, facilities and utilities sustainability priorities. These initiatives are described in the table below and overleaf.

Estates, Facilities & Utilities Initiatives			
Estates, Facilities & Utilities Priority 1: Improving the sustainability of our estate			
#	**Initiative title**	**Description**	**Year**
E2.1	**LAS estates audit**	1. Carry out an audit (including EPC certificates and a refreshed stock condition survey) across all LAS estate to assess the least energy-efficient buildings	1. Q2 22/23
		2. Develop an energy-efficiency improvement plan, prioritising and planning the upgrades needed across the estate to improve energy efficiency	2. Q3 22/23

		3.	Develop business cases, where required, to deliver the energy-efficiency improvement plan (through improved insulation, for example)	3.	From Q3 22/23
E2.2	**Removal of gas boilers**	1.	Carry out a boiler audit and develop a gas-boiler removal plan, prioritising and planning the transition to lower-carbon sources of heating, ensuring plans are aligned with the energy-efficiency improvement plan (E2.1.2)	1.	Q2 22/23
		2.	Develop business cases, where required, to replace existing gas boilers with greener alternatives for heating (which may include air-source, ground-source heat pumps)	2.	Q2 23/24
		3.	Removal of all gas boilers across LAS estate by 2032 at the latest	3.	Q4 31/32
E2.3	**LED lighting**	1.	Replace all bulbs with LED alternatives when they come to the end of life (where supporting fittings and infrastructure support this).	1.	From Q1 22/23
		2.	Proactively replace lighting with low-energy LED substitutes, according to the energy-efficiency improvement plan (E2.1.2)	2.	Q2 22/23
E2.4	**Building Management Systems (BMS)**	1.	Include BMS as a minimum requirement of all new property business cases	1.	From Q1 22/23
		2.	Assess options and a preferred way forward for the rollout of BMS in buildings where these are not already in place	2.	Q2 23/24
		3.	Development of a business case for the rollout of BMS	3.	Q4 23/24
		4.	Subsequent delivery of the BMS business case(s)	4.	From Q4 23/24
E2.5	**Waste water recycling** (vehicle washing)	1.	Investigate options and agree a preferred way forward for reclaiming waste water and harvesting rainwater for vehicle washing and grey water	1.	Q4 22/23
		2.	Develop business cases, where required, to deliver preferred way forward	2.	Q2 23/24
E2.6	**Estates enablers for fleet and staff transport**	1.	Include the provision of sufficient electric vehicle charging infrastructure as a minimum requirement for all new major refurbishments or construction projects	1.	From Q1 22/23
		2.	Include the provision of sufficient shower, locker and bike rack facilities as a minimum requirement for all new major refurbishments or construction projects.	2.	From Q1 22/23
E2.7	**Energy efficient white goods and equipment**	1.	Carry out an audit of equipment across our front-line estate, and assess options for more energy-efficient options, e.g. fridges in mess rooms	1.	Q2 23/24
		2.	Develop a replacement plan for equipment and white goods, based upon the outputs of E2.9.1	2.	Q4 23/24
E2.8	**Adaptation planning**	1.	Assess the adaptations that will be required across the LAS estate to mitigate against the impact of a changing climate	1.	Q4 24/25
E2.9	**Green surroundings & biodiversity**	1.	Review the LAS estate for opportunities to grow wildflowers, and introduce ‘no mow’ zones where appropriate.	1.	Q3 22/23
		2.	Explore opportunities for funding from the fourth sector to enhance building surroundings by planting trees, installing ponds, introducing beehives or installing ‘live walls’.	2.	Q4 22/23

Estates, Facilities & Utilities Priority 2: Switching to 100% renewable sources of energy			
#	**Initiative title**	**Description**	**Year**
U1.1	**Purchasing 100% renewable energy**	1. Switch to a Renewable Energy Guarantees Origin (REGO) backed 'green' tariff with our energy supplier	1. Q1 22/23
U1.2	**Installation of solar panels on existing estate**	1. Carry out a feasibility study for installing solar panels and battery storage on existing LAS sites (e.g. HQ) to generate sustainable energy and improve self-sufficiency. 2. Develop business cases, where required, to install solar panels on existing estate 2. Delivery of preferred way forward, as per business case timelines	1. Q2 23/24 2. Q4 23/24 2. Q1 24/25
Estates, Facilities & Utilities Priority 3: Improving our waste sustainability			
#	**Initiative title**	**Description**	**Year**
W1.1	**Reusable pharma / sharps bins**	1. Engage with suppliers to influence the design of bespoke bins for ambulances and crews to enable the recycling of pharma / sharps	1. Q4 23/24
W1.2	**Recycling infrastructure**	1. Commence a roll out programme of clear transparent recycling bins to improve recycling compliance (correct items in the correct bins) across stations	1. Q2 22/23
W1.3	**Battery recycling**	1. Extend the number of battery recycling bins across the Trust	1. Q4 22/23
W1.4	**Correct use of bins**	1. Work with suppliers and comms to display posters due to change of supplier, advising of the correct use of recycling options.	1. Q4 22/23
W1.5	**Waste data analysis**	1. Working with SMEs and/or a Sustainability Manager to carry out an audit of waste collection data to identify specific opportunities for improvement	1. Q4 22/23
W1.6	**Uniform and kit bag disposal**	1. Investigate options and agree a preferred way forward to dispose of uniforms and kit-bags higher up on the waste hierarchy. 2. *(At present the process involves shredding for security purposes & incineration (energy recovery)*	2. Q4 22/23
W1.7	**Office furniture**	1. Sign up to 'Warp It' scheme for repurposing of office items within LAS and public sector organisations	1. Q2 22/23

A.3 Fleet and transport

There are three sustainability priorities for the fleet and transport area of the Carbon Neutral Plan.

#	Priority Net Zero Area	Description
1	**Ensuring ULEZ compliance**	Transitioning our remaining non-compliant fleet to a fully ULEZ-compliant fleet by October 2023 to meet the deadline set by the Greater London Authority
2	**Transitioning to, and sustaining, a zero emission fleet**	Delivering front-line, support and corporate services from a zero-emissions fleet, and establishing the supporting infrastructure required to sustain this.
3	**Supporting staff to make greener commuting choices**	Supporting staff to adopt greener methods of commuting by, for example, ensuring that sufficient showers, bike racks and lockers are in place, and through the provision of EV charge points for the personal vehicles of our staff.

The fleet and transport area of the plan will have a major impact on the emissions related to fossil fuels, fleet and leased vehicles, energy (well-to-tank) and business travel. There will also be a minor impact on emissions related to manufacturing and from staff commuting.

The relationship between the fleet and transport sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

Fleet & Transport Sustainability Priorities	NHS Carbon Footprint										NHS Carbon Footprint Plus										
	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Priority 1: *Ensuring ULEZ compliance*	++			++		++	++														
Priority 2: *Transition to, and sustaining, a zero emissions fleet*	++			++		++	++											+			
Priority 3: *Supporting staff to make greener commuting choices*																				+	
Total – Fleet & Transport	++			++		++	++											+		+	

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the fleet and transport sustainability priorities. These initiatives are described in the table below and overleaf.

Fleet and Transport Sustainability Initiatives			
Fleet and Transport Priority 1: Ensuring ULEZ compliance			
#	**Initiative title**	**Description**	**Year**
F1.1	**Replace the remaining ULEZ non-compliant DCAs**	1. Procure up to 71 ULEZ-compliant lightweight DCAs in FY 22/23 2. Procure up to 71 ULEZ-compliant lightweight DCAs in FY 23/24 before October 2023	1. Q4 22/23 2. Q2 23/24
F1.2	**Replace remaining ULEZ non-compliant support and corporate fleet**	1. Replace remaining ULEZ non-compliant support/corporate vehicles with hybrid or electric alternatives	1. Q2 23/24
F1.3	**Fleet circular economy**	1. Carry out an options appraisal and agree a preferred way forward for the sustainable disposal of vehicles and parts, re-cycling materials or parts where possible.	1. Q2 22/23

Fleet and Transport Priority 2: Transitioning to, and sustaining, a zero-emission fleet			
#	**Initiative title**	**Description**	**Year**
F2.1	**EV charging infrastructure**	1. Set out the approach to adapting LAS estate to enable EV charging infrastructure in the Trust Estates Strategy	1. Q1 22/23
		2. Deliver minimum viable charging infrastructure for zero emission vans, NETS and support fleet	2. Q3 22/23
		3. Deliver minimum viable charging infrastructure for DCAs and blue-light cars	3. Q1 24/25
F2.2	**Zero emission:** Vans, NETS and Support Fleet	1. All new vans, NETS and support vehicles must be zero emission	1. From Q3 22/23
F2.3	**Zero emission:** DCAs and blue-light cars	1. All new DCAs and blue-light vehicles must be zero emission	1. From Q1 24/25
Fleet and Transport Priority 3: Supporting staff to make greener commuting choices			
#	**Initiative title**	**Description**	**Year**
E2.6	**Estates enablers for fleet and staff transport**	2. Include the provision of sufficient shower, locker and bike rack facilities as a minimum requirement for all new major refurbishments or construction projects.	2. From Q1 22/23
F3.1	**Car lease schemes**	1. Reducing the cap on emissions for salary sacrifice cars from 109 g/km CO_2 to 100 g/Km CO_2. This will ensure that all vehicles on the salary sacrifice scheme are low emission, hybrid or electric.	1. Q4 23/24
F3.2	**Flexible Working Policy**	1. Maintain an Agile Working Policy to enable corporate staff to continue working remotely to reduce the need for daily commuting	1. From Q1 22/23
		2. Carry out a review of where additional teams across the organisation could increasingly work remotely	2. Q4 22/23
		3. Review and update the Agile Working Policy	3. Q4 22/23
F3.3	**Staff EV charging**	1. Carry out an options appraisal and identify a preferred way forward for the provision and use of EV charging points for staff vehicles	1. Q2 23/24

A.4 Procurement and supply chain

There are three sustainability priorities for the procurement and supply chain area of the Carbon Neutral Plan

#	Priority Net Zero Area	Description
1	**Encouraging decarbonisation of suppliers**	Updating LAS procurement practices to recognise and reward sustainable suppliers.
2	**Supporting product or service innovation**	Identifying common products or services that have the largest sustainability improvement opportunities (for instance, relating to a reduction in single-use plastics), and engaging with suppliers to innovate and develop greener alternatives.
3	**More efficient distribution and use of supplies**	Ensuring that supplies are distributed and used across the organisation in a way that reduces waste, and reduces emissions.

The procurement and supply chain area of the Carbon Neutral Plan will have a major impact on the emissions that sit as part of the wider emissions footprint (the 'NHS Carbon Footprint Plus'). There will also be a minor impact on emissions related to fossil fuels and waste.

The relationship between the procurement and supply chain sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

Procurement & Supply Chain Sustainability Priorities	NHS Carbon Footprint										NHS Carbon Footprint Plus										
	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Priority 1: *Encouraging the decarbonisation of suppliers*											++	++	++	++	++	++		++	++		
Priority 2: *Supporting product or service innovation*								+			+	+			+	+		+	+		
Priority 3: *More efficient distribution of supplies*	+			+		+	+														
Total – Procurement & Supply Chain	+			+		+	+	+			++	++	++	++	++	++		++	++		

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the procurement and supply chain sustainability priorities. These initiatives are described in the table below and overleaf.

Procurement and Supply Chain Sustainability Initiatives			
Procurement and Supply Chain Priority 1: Encouraging decarbonisation of suppliers			
#	**Initiative title**	**Description**	**Year**
P1.1	**Influencing buying behaviour** (LAS)	1. Develop sustainability guidance for LAS staff (working with Sustainability Manager) to support sustainable procurement and a change in buyer behaviour 2. Update LAS Business Case templates to include guidance relating to sustainable procurement, including, for example, consideration for energy efficiency, waste disposal methods and costs.	1. Q2 22/23 2. Q2 22/23

P1.2	**Influencing supplier behaviour**	1. Engage with suppliers through market engagement events to share our sustainability ambitions and give them sight of requirements for baseline and target sustainability data in tender submissions 2. Develop draft guidance (working with Sustainability Manager) to support suppliers to calculate baseline emissions data 3. Add a public notice to the LAS website highlighting our commitment to becoming net zero	1. From Q3 22/23 2. Q3 22/23 3. Q3 22/23
P1.3	**Sustainability prioritisation in tenders & contract renewals**	1. Develop template wording on LAS sustainability ambitions to include in supplier questionnaires and procurement adverts 2. Update all procurement adverts and supplier questionnaires to include sustainability ambitions 3. Develop stock of sustainability questions for inclusion in ITT templates (which may understand supplier decarbonisation initiatives, supplier baseline data and target emissions data) 4. Ensure that all ITTs include sustainability questions 5. Include Social Value responses as a minimum of 10% of the scoring matrix in all procurement selection criteria *(This is dictated by NHSE/I and the Cabinet Office, but the LAS preference will be to maximise carbon reduction when considering social value).* 6. Ensure Sustainability Manager is involved in the evaluation of the technical aspects of bids for contracts with large sustainability opportunities	1. Q1 22/23 2. Q2 22/23 3. Q2 22/23 4. From Q4 22/23 5. Now, to be monitored from Q1 22/23 6. From Q4 22/23
P1.4	**Capturing sustainability data in Atamis**	1. Begin quarterly audits to ensure that baseline and target data is routinely captured and monitored through Atamis 2. Annual review of Atamis data to identify largest opportunities to work with suppliers to improve sustainability, and to QA self-reported data	1. Q2 23/24 2. Q4 23/24

Procurement and Supply Chain Priority 2: Supporting product or service innovation

#	Initiative title	Description	Year
P2.1	**Procurement catalogue**	1. Carry out a product review across catalogues, identifying the biggest opportunities to reduce single use plastics by engaging with suppliers 2. Carry out a review to reduce the number of LAS suppliers to increase purchasing power and reduce the number of supplier vehicle journeys to LAS.	1. Q4 22/23 2. Q2 23/24
P2.2	**Procurement category plans**	1. Carry out a review of the procurement running order to identify contracts that have the biggest opportunities to contribute to sustainability objectives 2. Update category plans to prioritise contracts with the largest sustainability opportunities	1. Q4 22/23 2. Q4 22/23

Procurement and Supply Chain Priority 3: More efficient distribution and use of supplies					
#	**Initiative title**	**Description**		**Year**	
P3.1	**RFID technology**	1.	Implementation of RFID / barcode technology to enable tracking of equipment (e.g. defibs) – enabling enhanced stock control, equipment maintenance schedules, improving device lifespan, reducing replacements, avoiding disposal/ waste	1.	Q3 22/23
P3.2	**Logistics deliveries**	1.	Carry out a review of deliveries and mileage covered by LAS logistics vehicles and develop a preferred way forward for updating the logistics function to, for example, reduce frequency of deliveries, utilise zero-emissions vans and night routes for combined deliveries, where possible	1.	Q4 22/23

A.5 Digital

There are three sustainability priorities for the digital area of the Carbon Neutral Plan

#	Priority Net Zero Area	Description
1	**Using digital as a sustainability enabler**	Digital technologies, like video functionality or supporting applications which enable increased remote functionality, are an important enabler to reduce emissions related to avoidable staff journeys.
2	**Improving the environmental sustainability of IM&T operations**	Initiatives which reduce the electricity consumption of our IM&T infrastructure and reduce waste are necessary to deliver a sustainable IM&T department.
3	**Collecting and using sustainability data**	We will begin collecting and analysing sustainability data to support evidence-based decision-making around future sustainability initiatives.

As a crucial enabler for sustainability, the digital area of the plan will have a minor impact across the majority of the LAS carbon footprint and carbon footprint plus. The relationship between the digital sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

Digital Sustainability Priorities	NHS Carbon Footprint										NHS Carbon Footprint Plus										
	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Priority 1: *Using digital as a sustainability enabler*	+			+		+	+	+	+				+							+	+
Priority 2: *Improving the environmental sustainability of IM&T operations*		+			+														+		
Priority 3: *Collecting and using sustainability data*	+	+			+			+	+		+	+	+	+	+	+		+	+	+	
Total - Digital	+	+		+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the digital sustainability priorities. These initiatives are described in the table below and overleaf.

Digital Sustainability Initiatives			
Digital Priority 1: Using digital as a sustainability enabler			
#	**Initiative area**	**Description**	**Year**
C1.2	**Video functionality**	1. Improving access to 111/999 clinical video assist to reduce overall journeys, where clinically appropriate	1. Q2 22/23
		2. Explore the evidence base for the application of video-assist technology for different clinical specialty interventions	2. Q4 22/23
		3. Testing of potential clinical-specialty video-assist technologies	3. Q2 23/24
D1.2	**Digitising processes**	1. Launch mobile e-prescribing on clinician iPads	1. Q4 22/23
		2. Digitise the safeguarding process to enable remote completion and an improved user experience	2. Q2 23/24

		3. Integrate direct booking services	3. Q3 22/23
		4. Digitise corporate staff processes (to enable, for example, secure digital signatures rather than a requirement for wet signatures)	4. Q2 22/23
		5. Implementation of electronic controlled-drugs registers	5. Q1 23/24
D1.3	**Digitally-enabled training**	1. Enable digital first learning to increase the remote delivery of learning and development	1. Q4 22/23
		2. Enable digital training simulation to mature LAS capability for digitally-enabled learning & development	2. Q1 23/24

Digital Priority 2: Improving the environmental sustainability of IM&T operations

#	Initiative title	Description	Year
D2.1	**Migration to cloud**	1. Audit of applications and infrastructure to build cloud migration case and delivery plan	1. Q3 22/23
		2. Migration of all IM&T services to the cloud or hosted infrastructure	2. Q4 23/24
D2.2	**IT assets at end of life**	1. Investigate options and agree a preferred way forward for the re-use and/or recycling of end-of-life IT assets	1. Q3 22/23

Digital Priority 3: Collecting and using sustainability data

#	Initiative title	Description	Year
D3.1	**Fleet data improvements**	1. Implementation of advanced vehicle monitoring and analytics	1. Q3 22/23
D3.2	**Evaluation of digital benefits**	1. Evaluation of the impact of 111/999 video assist technology against intended benefits	1. Q4 22/23
		2. Evaluation of clinical specialty video assist and on-scene video assist	2. Q2 23/24
D3.3	**Central Asset Management (CAM) System**	1. Delivery of our CAM System to understand where our assets are and how we best manage them	1. Q3 22/23
E2.1	**LAS estates audit**	1. Carry out an audit (including EPC certificates and a refreshed stock condition survey) across all LAS estate to assess the least energy-efficient buildings	1. Q2 22/23
W1.4	**Waste data analysis**	1. Working with SMEs and/or a Sustainability Manager to carry out an audit of waste collection data to identify specific opportunities for improvement	1. Q4 22/23
P1.2	**Influencing supplier behaviour**	1. Engage with suppliers through market engagement events to share our sustainability ambitions and give them sight of requirements for baseline and target sustainability data in tender submissions	1. From Q3 22/23
P1.4	**Capturing sustainability data in Atamis**	1. Begin quarterly audits to ensure that baseline and target data is routinely captured and monitored through Atamis	1. Q2 23/24
		2. Annual review of Atamis data to identify largest opportunities to work with suppliers to improve sustainability, and to QA self-reported data	2. Q4 23/24
X2.4	**Sustainability Survey**	1. Launch and promote the sustainability survey to all staff on an annual basis to understand changes in attitude and behaviours over time, and to capture data on commuting habits	1. From Q4 22/23

A.6 People, Culture and Communications

There are three sustainability priorities for the people, culture and communications area of the Carbon Neutral Plan

#	Priority Net Zero Area	Description
1	**Raising awareness of sustainability**	Using communications channels to raise awareness of sustainability drivers and initiatives across the organisation and with external partners
2	**Supporting behavioural change**	Encouraging LAS people to adopt more sustainable behaviours and get involved with sustainability initiatives
3	**Enabling sustainability through our corporate operations and processes**	Reducing the environmental impact of our corporate operations and processes by supporting staff to work remotely, where possible, and reducing the generation of waste.

As a crucial enabler for sustainability, the people, culture and communications area of the plan will have a minor impact across the majority of the LAS carbon footprint and carbon footprint plus. The relationship between the sustainability priorities and emissions sources is illustrated in the heat map below:

Key:
++ Major impact
\+ Minor impact

	NHS Carbon Footprint										NHS Carbon Footprint Plus										
People, Culture & Communications Sustainability Priorities	Fossil fuels	NHS Facilities	Anaesthetics	NHS Fleet & Leased Vehicles	Electricity	Energy Well-to-tank	Business Travel	Waste	Water	Metered-dose inhalers	Medical Devices	Freight Transport	Business Services	Construction	Medicines	Food & Catering	Commissioned health services outside NHS	Manufacturing	ICT	Staff Commuting	Patient & Visitor Travel
Raising awareness of sustainability	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+
Supporting behavioural change	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+
Enabling sustainability through our corporate operations and processes	+	+		+	+	+	+	+	+											+	
Total – People, Culture & Communications	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+

A number of initiatives and activities will need to be delivered over the next three years to deliver the intended impacts of the people, culture and communications sustainability priorities. These initiatives are described in the table below and overleaf.

People, Culture and Communications (PCC) Sustainability Priorities			
PCC Priority 1: Raising awareness of sustainability			
#	**Initiative title**	**Description**	**Year**
X1.1	**Green campaigns**	1. Develop a sustainability comms and engagement plan that is annually updated 2. Deliver quarterly green campaigns, including content for internal and external audiences 3. Developing a green crib sheet which describes the steps that all LAS people can take as individuals	1. Q1 22/23 2. From Q1 22/23 3. Q4 22/23
X1.2	**Green repository**	1. Collate a central repository of sustainability information and launch on the Pulse and LAS website 2. Bi-annual refresh of sustainability information on Pulse and LAS website	1. Q2 22/23 2. From Q4 23/24

X1.3	**Induction communications**	1.	Working with a sustainability manager to develop short induction comms on our sustainability ambitions and achievements, and to raise awareness of sustainable behaviours	1.	Q3 22/23
		2.	Launch use of induction comms	2.	Q4 22/23
X1.4	**Patient and Public Council**	1.	Provide annual update to the Patient and Public Council on sustainability initiatives and achievements	1.	From Q4 22/23

PCC Priority 2: Supporting behavioural change

#	Initiative title	Description		Year	
X2.1	**Sustainability Manager**	1.	Establish a Sustainability Manager post to co-ordinate and drive the delivery of the Green Plan (see Chapter 4)	1.	Q1 22/23
X2.2	**Eco-champion network**	1.	Sustainability Manager to present a proposal for a network of eco-champions to the Sustainability Steering Group	1.	Q3 22/23
		2.	Mobilise an eco-champion network	2.	From Q4 23/24
X2.3	**Sustainability e-Learning**	1.	List sustainability eLearning as a core competency for all roles in the organisation	1.	Q3 22/23
		2.	Provide an annual report on sustainability eLearning completion rates to the Sustainability Steering Group	2.	From Q4 22/23
X2.4	**Sustainability Survey**	1.	Launch and promote the sustainability survey to all staff on an annual basis to understand changes in attitude and behaviours over time, and to capture data on commuting habits	1.	From Q4 22/23

PCC Priority 3: Enabling sustainability through our corporate operations and processes

#	Initiative title	Description		Year	
X3.1	**Reducing reliance on paper comms**	1.	Switching to a 'digital first' principle for all internal and external comms, unless where not appropriate (for access requirements, for example)	1.	From Q1 22/23
D1.2	**Digitise processes**	2.	Digitise corporate staff processes	2.	Q2 22/23
X3.2	**Food & Nutrition**	1.	Include sustainability principles in the evaluation of options for modernising the HQ canteen, including consideration for food waste, and promoting local and seasonal food supply.	1.	Q1 22/23
F3.2	**Flexible Working Policy**	1.	Maintain an Agile Working Policy to enable corporate staff to continue working remotely to reduce the need for daily commuting	1.	From Q1 22/23
		2.	Carry out a review of where additional teams across the organisation could increasingly work remotely	2.	Q4 22/23
		3.	Review and update the Agile Working Policy	3.	Q4 22/23

Appendix B – National Publications

There are a number of national documents which frame the requirements for the LAS Carbon Neutral Plan, and these are summarised in the tables below.

National Legislation

Policy / Strategy	Year	Summary
Environmental Protection Act	1990	The Act makes provision for the improved **control of pollution to the air, water and land** by regulating the management of waste and the control of emissions. Since 1990, several provisions have been replaced by subsequent environmental legislation, which should therefore be considered in conjunction with the Act.
Civil Contingencies Act	2004	This is one of the most relevant pieces of legislation to **emergency planning for flooding**. It lists emergency services as 'Category 1' responders to emergencies and requires us to have robust and flexible emergency planning and interoperability arrangements.
Climate Change Act	2008	The Act is the basis for the UK's approach to tackling and responding to climate change. The UK government is committed by law to **reducing greenhouse gas emissions by at least 100%** (net zero) of 1990 levels by 2050 and the NHS is expected to play its part. The revised 100% target is based on advice from the Committee on Climate Change 2019 report
Public Sector (Social Value) Act	2012	The Act calls for all **public sector commissioning** to factor in economic, social and environmental well-being in connection with public services contracts and for connected purposes. This is achieved through the NHS accredited suppliers list.
UK Emissions Trading Scheme (UK ETS)	2021	This scheme replaces the UK's participation in the EU Emissions Trading Scheme. The 4 governments of the UK have established the scheme to **increase the climate ambition of the UK's carbon pricing policy**, whilst also protecting the competitiveness of UK businesses.

National Documentation

Policy / Strategy	Year	Summary
The Stern Review 2006: The Economics of Climate Change	2006	A landmark study which assessed a wide range of evidence on the impacts of climate change and on the **economic costs**. It concludes the benefits of strong and early action far outweigh the economic costs of not acting.
Sustainable procurement: the Government Buying Standards (GBS)	2012	This paper sets out standards for **sustainable procurement** - a process whereby organisations meet their needs for goods, services, works and utilities in a way that benefits not only the organisation, but also society and the economy, while minimising damage to the environment. Whilst mandatory for governmental departments, this is also encouraged for wider public sector.
Health Protection Agency: Health Effects of Climate Change in UK	2012	The HPA provides an overview of evidence and recommendations in relation to climate change. It cites flooding as a cause for **disrupted ambulance services** and recommends **flood risk assessments** to be carried out at ambulance stations.

DEFRA: The Economics of Climate Change – Health & Wellbeing	2013	This report shows climate change has a direct effect on the **population's health**. For example the mental health impact of flooding and the impact of rising temperatures on older people. It also explores adaptation actions for flooding in NHS buildings.
Clean Growth Strategy	2017	An ambitious blueprint for Britain's low carbon future, exploring **business efficiency, transport, power, innovation** and with a focus on the public sector.
DEFRA: National Adaptation Programme	2018	This policy paper sets out what the government and others will do over the next 5 years to make the country more resilient to climate change. Emergency services must have **incident management arrangements** in place for floods / extreme weather.
DEFRA: Clean Air Strategy	2019	This strategy shows how DEFRA will tackle all sources of **air pollution**, making our air healthier to breathe, protecting nature and boosting the economy.
A Green Future: Our 25 Year Plan to Improve the Environment	2018	As well as reducing carbon emissions and building resilience against climate change, the Government's plan considers the link between **sustainability and health**, touching upon social prescribing, e.g. recommending gardening or outdoor exercise to combat loneliness and isolation, and thereby improving mental health.
UK Climate Emergency	2019	The English, Scottish and Welsh governments all declared **climate emergencies.** It does not legally compel the government to act, but demonstrates the will of the Commons on tackling the green agenda and becoming carbon neutral.
Net Zero: The UK's contribution to stopping global warming	2019	Committee on Climate Change proposed a **new emissions target for the UK by 2050** (taking the Climate Change Act target from 80% to 100% reduction in greenhouse gases – i.e. net zero)
Government's COVID-19 Recovery Strategy	2020	The government has announced plans to **'build back greener'** as part of the Covid-19 recovery strategy. £134m is to be invested in UK businesses on clean growth projects, developing new technologies and to secure new jobs

NHS publications and guidance

Policy / Strategy	Year	Summary
NHS Carbon Reduction Strategy	2009	The *'Saving Carbon, Improving Health'* paper sets out the case for action by the health sector in London. It states that the ultimate responsibility for reducing carbon lies with **Trust Chief Executives**
The Marmot Review	2010	The *'Fair Society, Healthy Lives'* paper proposes a new way to **reduce health inequalities** in England, ensuring social justice, health and sustainability are at the heart of all policies
Carter Review	2016	The Review identifies a significant opportunity for Trusts to achieve **cost efficiencies** by reducing their energy consumption which will also **mitigate against the effects of climate change** through improved energy efficiency.
Naylor Review	2017	This NHS Property and Estates report considers 'why the estate matters for patients' and recommends a holistic approach to estates management, which considers **space use and environmental efficiency**

Public Health Outcomes Framework	2019	The report sets PHE's out a vision to **improve and protect the nation's health**. The PHOF is used as a tool for local transparency and accountability, providing a means for benchmarking progress within each local authority and across authorities Is this another tool we need to use??
NHS Long Term Plan	2019	This mentions **reducing fleet air pollution emissions by 20% by 2023/24** and supporting the government's target to **reduce emissions by 80% by 2050**
Delivering a Net Zero NHS	2020	This report follows the 2009 NHS Carbon Reduction Strategy. It sets a commitment to be **net zero by 2040 for the emissions that the NHS controls directly**, and to reach an **80% reduction** (from 1990 levels) **by 2028 to 2032**.
NHS Standard Contract	2020/21	Providers must plan to address the **social, economic and environmental aspects of sustainable development**, addressing not only climate change and carbon reduction, but also air pollution, minimising waste and use of plastics

Appendix C – LAS Carbon Neutral Plan alignment with national guidance

NHSE/I 'How to produce a Green Plan' national guidance sets out the minimum requirements of a Green Plan and suggests that NHS organisations should structure their document differently according to their needs.

The table below shows the alignment of the six LAS areas of focus, with the areas of focus that are described in the NHSE/I '*How to produce a Green Plan*' national guidance.

		LAS Areas of Focus					
		Clinical operations	Estates, facilities & utilities	Fleet & transport	Procurement & supply chain	Digital	People, culture & communications
NHSE/I areas of focus	Workforce & system leadership						X
	Sustainable models of care	X					
	Digital transformation					X	
	Travel and transport			X			
	Estates and facilities		X				
	Medicines	X					
	Supply chain and procurement				X		
	Food and nutrition						X
	Adaptation	X	X				

Figure 15: Alignment of six LAS areas of focus with national guidance