

# Single Environment Plan

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# Single Environment Plan

## 1 Introduction

1.1. In aiming to achieve sound environmental performance, LFC has recognised the need for a systematic approach to environmental management. The diagram below shows how this plan aligns to the London Safety Plan (LSP) and other strategies and policies relating to the environment

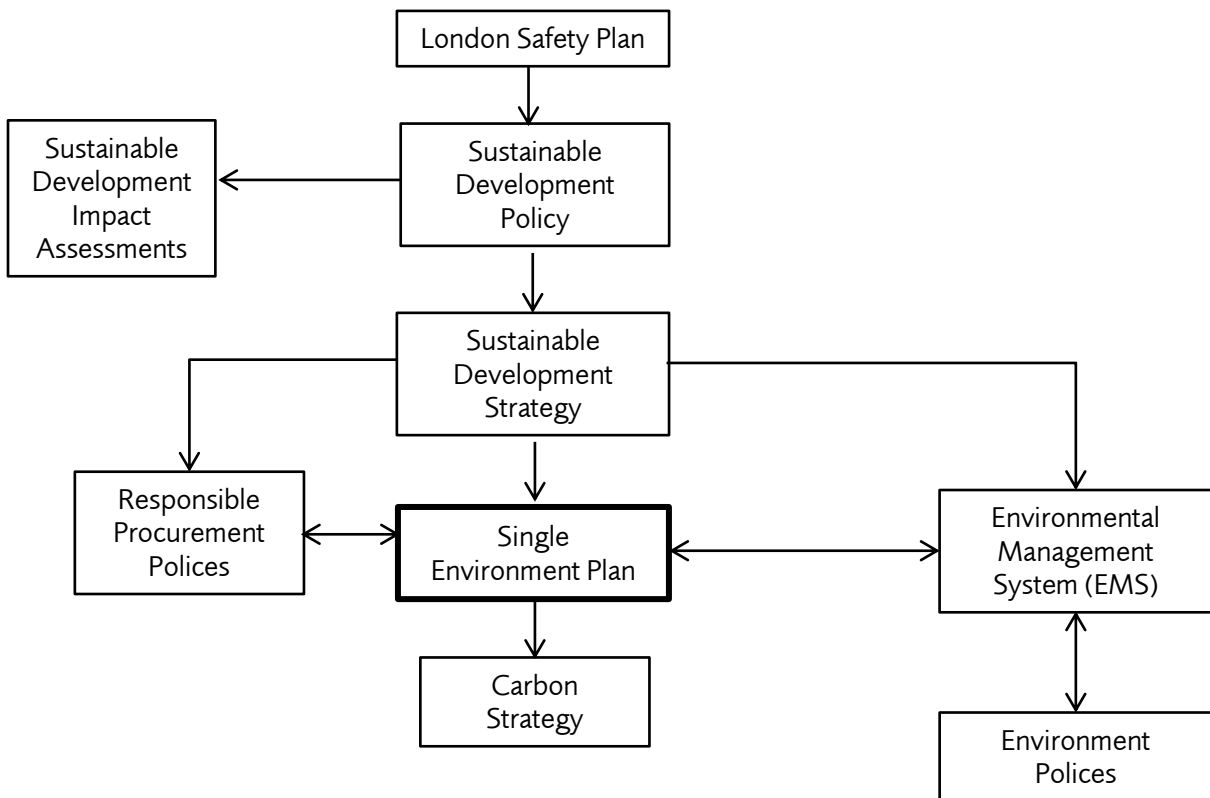


Diagram 2: Alignment of corporate plans to the Single Environment plan

1.2. Previously LFC had several plans covering staff travel and air quality, biodiversity and waste and recycling, these areas are still relevant to the LFC and actions covering these areas will be included into this single environment plan. Producing a single environment plan in line with the LES provides an integrated approach to addressing environmental challenges facing the LFC.

1.3. The Mayors London Environment Strategy (LES) sets the aims for London to be a greener, cleaner city which is ready for the future. One of the core principles of the LES is that the Mayor and the GLA group, including LFC, should lead by example in its own operations by tackling environmental challenges and procuring responsibly – delivering, driving and enabling best practice.

1.4. The LES incorporates the following themes; Air quality; Green infrastructure; Climate change mitigation and energy; Waste; Adapting to climate change and Ambient noise. We have reviewed the LES themes, and taken across the aims which are relevant for the LFC, as shown in table 1 below.

Table 1- Alignment to the LES

LES themes	LFC actions set out in LES	LFC additional actions to the LES
Air quality	✓	✓
Green infrastructure	✓	✓
Climate change mitigation and energy	✓	✓
Waste	✓	
Adapting to climate change	✓	
Ambient noise		

## 2 Air Quality

### Key Issues for London

- 2.1. The quality of London's air is poor and damaging pollutants harm human health and quality of life. Annually over 9,000 Londoners' lives end sooner than they should because of air pollution<sup>1</sup>.
- 2.2. The LES has identified that air quality is the most pressing environmental threat to the future health of London, and has accordingly set the aim for London to have the best air quality of any major world city by 2050.

### Key Issues for LFC

- 2.3. London's poor air quality will have a negative health impact on everyone, with LFC staff working within the capital on a daily basis. We know that vulnerable people are most affected, and are also at most risk from fires. The LFC is also a contributor to poor air quality with a fleet of some 460 vehicles, of which around 12% are zero emission capable. Our 103 fire stations and other corporate buildings also contribute to the emissions through heating and hot water provision.
- 2.4. Our challenges include vehicle mileage that is largely dictated by incident numbers that we can only influence through prevention and protection measures; the operational need for an estate of multiple small scale buildings spread across London; and staff moving further from London due to housing/rental and quality of life<sup>2</sup>, reducing opportunities for commutes by walking and cycling.
- 2.5. Key findings from the most recent 2017 travel survey were:
  - staff commuting distances are continuing to increase with a third travelling more than 30 miles each way, particularly operational staff;
  - staff walking and cycling to work has dropped and whilst the predominant incentives to change are outside of the LFCs control, or are due to operational constraints there are still some potential easy to address measures;

<sup>1</sup> <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>

<sup>2</sup> Travel Plan and Staff Travel Survey Update 2017

- measures that would encourage staff to walk or cycle are beyond our scope of responsibility, for example, living closer to their work location and safer cycle routes

## Aims

- To achieve compliance with the Ultra Low Emission Zone (ULEZ)
- Working towards targets set out in the LES:
  - all cars in GLA group support fleets being zero emission capable by 2025;
  - all new cars and vans (less than 3.5 tonnes) in GLA group fleets, including response vehicles, being zero emission capable from 2025;
  - all heavy vehicles (greater than 3.5 tonnes) in GLA group fleets being zero emissions capable or fossil fuel-free from 2030;
  - zero emission GLA fleets by 2050.
- To increase sustainable travel choices amongst employees for commuting and business travel.

## Actions

1. To reduce our fleet emissions and deliver on our fleet aims we will take forward our Ultra Low Emission Fleet Plan including:
  - Working with partners and industry to develop a low emission fire pumping appliance. Develop plans for our future infrastructure requirements to support our future fleet needs
  - Review the potential for the Fleet Operator Recognition Scheme (FORS) to support the LFCs ambitions to achieve FORS Gold.
  - Implement changes to include 'eco-driving' to reduce emissions within the driver training programme
2. To increase sustainable travel choices by staff we will:
  - Reduce the need for business travel by improving access to teleconferencing and video conferencing facilities and access to online training .
  - All grey fleet will be ULEZ compliant.
  - From January 2025, all new cars on the lease and essential car user schemes must be zero emissions capable, with no diesel vehicles.
3. To encourage our staff to choose more sustainable forms of travel we will:
  - Undertake periodic staff travel surveys to inform progress against targets.

- Continue to support Ride to Work.
  - Investigate accessing an e-bike trial to encourage take up of Ride to Work in light of the increasing staff commuting distances.
  - Conduct a workplace cycle audit to identify areas of improvement for staff business travel.
4. To encourage our supply chain to reduce transport related emissions:
- By supporting the take up of the Mayors Direct Vision Standard and plans to reduce Work Related Road Risk with key suppliers.
5. Zero air travel emissions through off-setting.

**Performance Indicators**

Measure	Target
Percentage of business trips by non-operational staff will be made on foot, by cycle or using public transport	80% by 2041
The percentage of normal commuting trips carried out by staff (excluding operational staff on the flexi duty system) will be made on foot, by cycle or using public transport by 2041	Monitored KPI
Compliance with ULEZ	Monitored KPI
Zero emission capable fleet	Monitored KPI

3 Green infrastructure

**Key Issues for London**

- 3.1. London's green infrastructure is the network of parks, green spaces, gardens, woodlands, rivers and wetlands and in addition features such as street trees and green roofs.
- 3.2. Green spaces benefit us in a number of ways, including; promoting healthier living; lessening the impacts of climate change; improving air quality and water quality; encouraging walking and cycling; storing carbon and improving biodiversity and ecological resilience.
- 3.3. There has been a gradual loss of green space across London in recent years as development encroaches on open space and gardens.
- 3.4. The LES aims for London to be the world's first National Park City where more than half of its area is green and for tree canopy cover to increase by ten per cent by 2050.

**Key Issues for LFC**

- 3.5. Sites of Special Scientific Interest (SSSI's) are the country's very best wildlife and geological sites, currently there are 36 sites designated within London. Wildlife and geological features are under pressure from development, pollution, climate change and unsustainable land management. Being designated as a SSSI gives legal protection to the best sites for wildlife

and geology in England, protecting and managing SSSI's is a shared responsibility, and an investment for the benefit of future generations.

3.6. Access to good quality green space has an impact on the health and wellbeing of LFC staff. Trees, shrubs and vegetation can, in some cases, improve outside air quality and reduce air pollution from traffic as the right green infrastructure in the right place can reliably reduce exposure to air pollution. A vegetation barrier can as much as halve the levels of pollutants just behind the barrier.<sup>3</sup>

3.7. It is recognised that many of our stations and offices have outdoor space, with ecological, aesthetic, and amenity value to both our staff and the community we serve. This ranges from simple grass verges to the front of stations, to gardens within the station grounds. The number of gardens at stations is increasing, being used to grow food, increasing biodiversity and a general place to de-stress.

## Aims

- Protect the environment from harm through emergency response and delivery of our service including incidents at designated (protected) sites
- To manage our estate in a way that delivers net gain for biodiversity through implementing sustainable drainage systems, planting trees and gardens, and installing green roofs

## Actions

6. To protect the environment from harm we will:

- Introduce the use of the National Environment Risk Assessment (NERA) to improve consistency of environmental risk assessments.
- Work with the Environment Agency to confirm our risk analysis of SSSI's in London in order to roll out its use with the Hazardous Materials and Environmental Protection Officers (HMEPO's)

7. To deliver net gain for biodiversity on our estate we will:

- Ensure Standard Station Design Brief (SSDB) supports blend of delivering renewable energy and green infrastructure
- Encourage gardens at Stations by continuing to support Brigade in Bloom
- Identify opportunities for tree planting at Stations with poor green infrastructure in support of the National Park City
- Undertake a trial to enhance green space at a station with poor ecological value to improve local amenity and air quality

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<sup>3</sup> <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/using-green-infrastructure-protect-people-air-pollution>

## Performance Indicators

There are no proposed performance indicators

## 4 Climate change mitigation and energy

### Key Issues for London

- 4.1. The UN Paris Climate Agreement commits to keeping global warming below 2°C. In addition, the 2008 Climate Change Act requires at least an 80 per cent reduction in CO<sub>2</sub> emissions (compared to 1990 levels) for the whole of the UK.<sup>4</sup>
- 4.2. Although London has reduced its emissions since they peaked in 2000, it is not yet on track to reduce its emissions quickly enough to avoid the worst impacts of climate change. London remains over-reliant on the fossil fuels that are a major contributor to climate change.
- 4.3. The LES aims for London to be a zero carbon city by 2050, with energy efficient buildings, clean transport and clean energy.

### Key Issues for LFC

- 4.4. It is clear that climate change will impact considerably on the provision of an emergency response service in the number and type of incidents that we attend and planning our resourcing accordingly.
- 4.5. LFC is on the frontline of climate change impacts including flooding and heatwaves which could increase the demands placed on our resources and our ability to respond. In London there is an increased risk of flooding and related rescues; and hotter drier summers are expected, increasing the risk of grass fires.

### Aims

- Reduce our CO<sub>2</sub> emissions by 60% from 1990 levels by 2025

### Actions

8. To reduce our CO<sub>2</sub> emissions by 60% from 1990 levels by 2025 we will deliver our carbon strategy, which includes key measures such as:
  - Achieve an average Display Energy Certificate rating of a C across all sites
  - photovoltaic energy installations at 28 Stations
  - LED lighting upgrades at 30 sites
  - boiler replacements at 15 stations
  - trialling air source heat pumps

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<sup>4</sup> <https://www.london.gov.uk/what-we-do/environment/climate-change/londons-climate-change-expertise>



- a feasibility study into a zero carbon fire station
- source renewable energy supply from the grid
- investigate the use of Power Purchase Agreements to encourage new renewable energy generation

**9. Encourage staff to reduce emissions through behaviour change:**

- Work with other brigades to encourage energy saving
- Working with green champions to identify opportunities for improvements through energy audits

**10. Support the community to use energy more appropriately through our prevention and protection work:**

- Support community fuel poverty/healthy homes networks with referrals and service promotion where appropriate.

**Performance Indicators**

Measure	Target
Reduction in GLA group CO2 emissions	60% by 2025

## 5 Waste

**Key Issues for London**

- 5.1. London produces too much waste, with around 7million tonnes coming from London's homes, public buildings and businesses each year, too much of which goes to landfill and incineration. Of this, only 41 per cent is currently recycled and performance has stagnated. Landfill capacity is set to run out by 2026.
- 5.2. Use of single use packaging, including coffee cups and plastic bottles, is growing and putting increasing pressure on local waste management services. Plastic packaging not only litters London streets, but pollutes the environment on a global scale.
- 5.3. The LES aims to ensure London will be a zero waste city. By 2026 no biodegradable or recyclable waste will be sent to landfill, and by 2030 65 per cent of London's municipal waste will be recycled.

**Key Issues for LFC**

- 5.4. LFC has a duty to ensure that all waste streams are disposed of responsibly, using the appropriate schemes in place. Due to the diverse nature of the LFCs activities, a variety of waste is produced, from general waste and recyclable materials, to special and hazardous waste.

5.5. The LFC is committed to maintaining a 'zero waste to landfill' disposal rate and applies a 'waste hierarchical approach', to reduce, reuse, recycle and recover waste products in preference to the disposal of waste to landfill.

5.6. Waste disposal represents a financial and environmental cost to LFC and waste reduction, reuse and recycling can help reduce this cost.

**Aims**

- Cutting waste and achieving recycling rates of 80% by 2020
- Reducing single use packaging

**Actions**

11. To cut waste and achieve a rate of 80% recycling we will:

- Supporting our staff to undertake waste audits at Stations to identify local improvement actions.
- Removal of all individual bins at HQ & meeting rooms
- To support waste reduction and initiatives through our green champions behaviour change programme.
- Conduct a circular economy pilot project for our workwear.

12. To reduce single use packaging we will take forward our single use plastic action plan including:

- Eradicate unavoidable use of single use plastics within our catering contract.
- Cutting all unavoidable use of micro plastics in cleaning products used through our cleaning contract and products provided on POMS.
- Cutting all unavoidable use of single use plastic for internal meetings and events at HQ.
- Reduce single use plastic drink bottles by working with the GLA to provide public drinking water fountains.

**Performance Indicators**

Measure	Target
Increased recycling rates percentage	80% by 2020
Maintain zero Waste to landfill	Maintain 0

## 6 Adapting to climate change

### Key Issues for London

- 6.1. Climate change is likely to cause seasonal rainfall changes, with summers generally becoming drier, and winters wetter. The rainfall that does occur is likely to be in more intense storms. This will increase the risk of flooding, especially surface water flooding. London is likely to be at higher risk of drought, as there will be less water to be captured in the summer and the groundwater will not be replenished during winter, and there may be greater demand for water during hotter periods.<sup>5</sup>
- 6.2. Annual summer heatwave conditions predicted every year by 2050 could make homes, workplaces and public transport uncomfortable for all and Londoners' access to clean water could be compromised, as demand is set to outstrip supply in the next few years.
- 6.3. The LES aims to ensure London and Londoners will be resilient to severe weather and longer-term climate change impacts. This will include flooding, heat risk and drought.

### Key Issues for LFC

- 6.4. LFC is on the frontline of climate change impacts including flooding and heatwaves which could increase the demands placed on our resources and our ability to respond.
- 6.5. There is an increased potential of risks including; the availability of water, response and rescues from flooded properties, responding to extreme weather events, increased and more severe grass fires.

### Aim

Ensure that we have the capacity to respond to the challenges posed by climate change
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### Actions

13. To ensure that we have the capacity to respond to the challenges posed by climate change we will:
  - Assess opportunities to increase water efficiency across the LFC including:
    - Cold cutting equipment for specific types of incident.
  - Review our flood response capability in line with the LSP action:16

### Performance Indicators

There are no proposed performance indicators.

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<sup>5</sup> <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>