



Sustainable Development

Annual Report 2016/17

The cover photo is of the new BMW i3 range extender electric fleet cars

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Introduction by the London Fire Commissioner



As the new London Fire Commissioner my priority is to maintain our strong performance in keeping people safe and to make London Fire Brigade the most inclusive fire and rescue service in the UK. Having taken on this role in January 2017, I am pleased to see the progress made to date and I'm keen to push our organisation to continue to lead the way and deliver improvements in this area.

Providing a world class fire and rescue service for London, Londoners and visitors, needs to be in all aspects of what we do and how we do it. That's why I've set out how I plan to ensure my staff are able to achieve the best results, which will deliver a successful fire service. I also want to see that same level of consideration and fair conditions that I expect for my staff shown to the employees of those organisations we work with. In this respect we will continue to use our leverage with our suppliers to make this happen and scrutinise our own performance as set out in this report to push for improvement where we have direct control.

This report covers some of the other ways we can and do contribute indirectly to keeping Londoners safe, by helping to make our air cleaner and safer to breath or preventing pollution of waterways and sources of drinking water. We have been awarded for our efforts to move towards a lower emission fleet, changing 100 per cent of our fleet cars over to range extender electric vehicles and we are still on target to achieve 45 per cent CO₂ reduction by 2020 despite an increase on the previous year. However there are some areas where performance has dropped such as our recycling rate and I expect actions to be taken to understand why this is and how to get us back to a high standard.

Our staff and our stations are an important asset to our local communities and I'd like to see our stations increasingly used as a community resource. We provide publicly accessible electric vehicle chargepoints at 9 stations and in the past year many stations have helped to improve local biodiversity, supporting wildlife through a renewed interest in gardens at stations. This also brings added benefits for wellbeing, which is incredibly important for my staff who undertake what can be very stressful and at times traumatic roles.

I'm interested to hear from organisations and individuals, in particular our staff, about what you think about our progress in this area and what further opportunities there are to improve upon our key areas of focus.

A handwritten signature in black ink, appearing to be 'D Cotton', written in a cursive style.

Dany Cotton

London Fire Commissioner, London Fire and Emergency Planning Authority

1 Introduction

The London Fire Brigade (LFB) is run by the London Fire and Emergency Planning Authority (LFEPA). As one of the largest firefighting and rescue organisations in the world, employing some 5,712 people, we recognise our influence on the fire sector. Through our [Sustainable Development Strategy \(2016-20\)](#) we aim to continue leading the way on sustainable development within the UK fire and rescue service.

We have three corporate strategic aims: prevention and protection; response and resilience; and people and resources, which are supported by an underlying set of principles that cover inclusion, safety, sustainability, accountability and collaboration. Our Sustainable Development Strategy supports our principles. More details can be found in the [London Safety Plan 2017](#).

This report highlights performance against the objectives of our strategy and our sustainable development framework. We are working towards the Global Reporting Initiative's guidelines on sustainability, version 4. More detailed performance data on Inclusion; Community Safety; and Health Safety & Wellbeing is available through [Our Performance](#) and the [Fire Facts](#) reports on our website.

Sustainability Policies and Plans

The Brigade's core policies related to sustainability cover:

- Sustainable development covering the three pillars of sustainability: environmental, social and economic.
- The Environment, with specific policies addressing energy conservation, waste management, pollution prevention and gardens. With plans in place for [waste](#), [travel](#) and [biodiversity](#).
- Responsible Procurement, covering social, economic and environmental issues, including ethical sourcing and whole life costing.

Key Achievements for 2016/17

- The move of 100% of fleet cars to electric
- Adoption of our 10 year Inclusion strategy
- The opening of Braidwood Forest as part of 150 year celebrations
- Reaching the Achievement level of the London Healthy Workplace Charter

Sustainability Awards & Accreditations

- Green Fleet magazine awards: Public Sector Fleet of the Year award for Large Fleets- winner
- Fleet News awards: Green Fleet of the Year - shortlisting
- Go awards: Sustainable Procurement - shortlisting
- ISO 14,001 accredited certification for management functions and 10 high risk stations

Our Performance

Our sustainability performance is summarised by 10 indicators on page 6. We are on target for 4 of the 7 core indicators that have targets.

The figures provided in the performance summary chart and the body of this report for sickness, safety and fires are annual performance compared to our 5 year direction of travel (▼, ▲, ►) which we consider, to be more appropriate measures to show trends in performance, the remainder are annual trends.

Performance at a Glance



20,265 All fires *

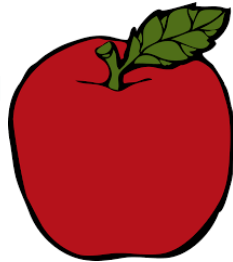
down from 20,773



84,880 HFSVs*

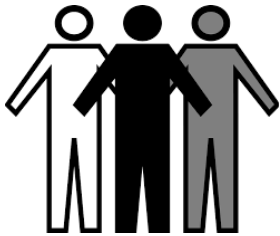
68,221 to high risk people/places¹

5.34% Operational staff Shifts/Days sickness lost*



71 RIDDOR² events*

down from 93



Excellent rating

Equality Standard for Fire and Rescue Service



21.1% SME spend*

down from 49.5%

40.5% CO₂ reduction*

up from 46.7%



54.1% Recycling*

down from 95.6%



162 Contractors staff paid London Living Wage



16 Apprenticeship starts

13 through our contracts

Comparison figures are from 2015/16, except for sickness, safety and fires, which are compared to the 5 year trend.¹

¹ High risk people include those at greater risk of experiencing a fire or with reduced ability to escape a fire such as being over 60, a smoker, disabled, living alone, single parents with young children, living in social housing, drug and alcohol addictions, mental health issues and those living in social care or domiciliary care.

² Reporting of Injuries, Diseases and Dangerous Occurrences Regulations.

* These figures form part of our suite of corporate indicators

1 Prevention, Protection, Response

Improve the safety and security of Londoners through our prevention and protection activities

- ✓ Time spent on community safety work by station staff: 14.10% ▲
- ✓ Home Fire Safety Visits (HFSVs): 84,880 ▲
- All Fires attended: 20,265 ▼
- ✓ Primary Fires: fatalities (10 year average): 46 ▼
- ✓ Primary Fires: injuries: 544 ▼

The 'Our Performance' section of our website provides further information about our performance in 2016/17 and earlier years. The Brigade publishes monthly data as part of an online mapping tool available at borough and ward level, available on the LFB website, and data sets are available on the London Datastore. Overall the number of incidents we respond to continues to fall as a result of our prevention and protection work.

Prevention

We know that our prevention work such as smoke alarms save lives and reduce the number of fires and their devastating impacts on the community. Aside from fatalities, injuries and other health impacts they can result in financial loss, pollution, loss of resources, and place our own staff at risk from response to and require considerable resourcing to respond. Youth engagement prevention initiatives included Junior Citizens, Prison-Me-No Way and Prince's Trust XL clubs. Over the past year our key initiatives delivered the following:

- 68,221 of our HFSVs were provided to high risk people and places (80.3 per cent).
- We reached 93,288 school children through all community safety activity, which included delivering 2,963 fire safety workshops to 86,713 primary school children.
- 630 young people completed 62 Local Intervention Fire Education (LIFE) courses. A further 8 bespoke courses were provided to those most at risk, identified through carers, the police and football clubs.
- 131 children and young people displaying fire setting behaviours were supported through the Juvenile Firesetters Intervention Scheme (JFIS).

Community Safety Investment fund

Our £1m fund to provide safety equipment in the homes of the most vulnerable people generated 118 bids. Due to the high standard of bids it was increased to £2.2m. All Boroughs received some funding for equipment including three sprinkler systems in housing blocks, water misting systems, telecare linked smoke alarms, and fire retardant bedding or furniture covers.

Through [REPORT IT](#) our fire fighters notified partner agencies of potential fire risks and environmental issues (abandoned cars, accumulated rubbish etc.) to address, as identified through 35,157 visual audits.

Prevention work in the Boroughs - Partnerships

Working in partnership to reduce anti social behaviour and hate crime. Working with the Local Authority in **Bromley**, the police and other partners on project CRYSTAL to reduce anti social behaviour around a number of areas including fly tipping, arson and graffiti. This led to the removal of over 12 tonnes of waste, 238m² of graffiti and 97 HFSVs in one 6 month period. By sharing hot spot data with partners in **Islington** we are helping to reduce small fires, moped snatch theft and vehicle incidents and support those affected by hate crime by providing victims with home fire safety visits and offering community reassurance.

Providing training to partners has helped to further the reach of our prevention messages including Arson reduction training to police in **Haringey** to target rubbish and car fires; and working with the police to visit 80 care facilities to improve contact, fire safety training and provide bespoke fire safety advice and information in **Waltham Forest**.

In **Newham** we are working closely with partners involved with Safeguarding and the Borough High Risk Panel to reach the most vulnerable to fire. By better focussing our resources to reach the most vulnerable an 80% reduction in fire deaths was achieved in the 2016 calendar year against the previous year.

Protection

Fires in non-domestic premises (subject to fire safety regulations) continue to fall to 1,951 incidents in 2016/17 (compared to 2,052 the year before), with our fire safety officers undertaking 14,643 inspections. Increasingly they focus on high risk premises, providing advice to building owners to reduce risk and serving notices when serious safety risks are identified. Prosecutions of landlords of premises with ongoing failures to comply with fire safety following notice included a care home in Penge and a shop in Brixton.

Our Fire Investigation team continue to identify the causes of preventable fires and offer advice. Recent analysis indicated that a third of electrical fires resulting in a fatality involved the incorrect use of portable electrical heaters. In 2016/17, there were 151 fires caused by electrical heaters, 33 injuries and two deaths.



Total Recalls

Nearly one fire a day in London involved white goods, costing the economy more than £118 million over the last five years. Our Total Recalls Campaign to drive industry change led to white goods' giant Whirlpool finally advising consumers to unplug dangerous faulty tumble dryers following the 20 pump Shepherd's Bush fire in August last year. Fire investigation identified this was caused by an Indesit tumble dryer that was subject to 'corrective action'. Whirlpool had previously told customers to continue using the affected dryers while they waited for modification, as long as they were not left unattended whilst in use.

Response

Following the success of our co-responding trial with the London Ambulance Service (LAS) to cardiac or respiratory arrest calls in **Merton, Newham, Lambeth** and **Wandsworth** boroughs, a national agreement is in development that aims to improve the approach and expand the pilot. Pilot boroughs continue to co-respond. Feedback from crews identified the significant contribution they made in support of the LAS at these incidents, in some instances, crucially, their support saved lives. Crews from stations in the four boroughs have responded to over 1,530 co-responding calls in 2016/17 and were instrumental in achieving ROSC (return of spontaneous circulation) on 45 occasions.

2 Health, Safety & Wellbeing

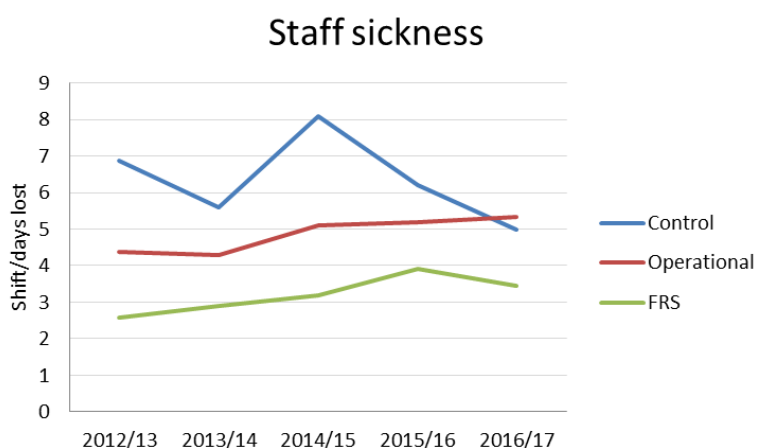
Protect and promote the health safety and wellbeing of our staff

Responding to emergencies places our staff in stressful situations that can pose risks to their physical and mental health. Health, safety and wellbeing is an important aspect for us in maintaining a productive workforce that can provide a quality service to the public.

Health

Whilst there has been a marginal increase in operational staff sickness, sickness amongst our control phone centre staff and non-operational (FRS) staff has decreased with Control sickness being close to target. The reduction correlates with the introduction of our attendance policy, which introduced sickness monitoring.

We know that attending a critical or major incident can be traumatic, and Stress, anxiety and depression (SAD) is for the first time since 2013, one of the top three reasons for sickness amongst operational staff. It is also the main cause of sickness for all other staff groups. A number of initiatives are in place to support employees to recover from SAD related illness, including a new initiative with MIND:



- Supporting MIND's 'Blue Light programme', that supports emergency services staff and volunteers, distributing the MIND booklet 'Fire and Rescue – How to manage your mental wellbeing' to all fire stations and other workplaces.
- A 'Mental Health Awareness' course, providing all staff with an awareness of mental health issues in their life and at work, whether it is for themselves, colleagues, family or friends.
- An in-house Counselling and Wellbeing (C&W) service.
- The 'Fit for Life' six week stress reduction programme, providing practical advice and information to help establish healthier approaches to work and life.
- A 'Recognising Stress and Building Resilience' course for managers.

Safety

✓ **RIDDOR events: 71 ▼**

✓ **Vehicle Events: 492 ▲**

The number of RIDDOR events (71) fell by 24 per cent when compared to the previous year (94). The most common events continuing to be slips, trips and falls, and manual handling with reductions in injuries following targeted proactive interventions over this and subsequent years.

The number of vehicle events or collisions remains below target, whilst increasingly marginally from the previous year. 66 per cent of these occur in non-emergency situations and involve frontline vehicles, specialist

vehicles and officer cars. Accidents are considered low when compared to the 1.3million vehicle movements per annum.

Actions to reduce vehicle and RIDDOR safety events include:

- Continuing our targeted slips and trips campaign, which delivered a 30 per cent reduction over two years.
- Thematic reviews of control measures such as policy and training for two target areas: forcing entry to premises and hose management and deployment.
- Analysis of statistical trends to inform internal news articles and management monitoring reports.
- Working with other fire and rescue services to develop a corporate audit approach and seeking peer review of our approach.
- Continuing to deliver premises audits as part of our health and safety management system.

Asbestos

Asbestos is present and actively managed in 83 of our premises. Nine high risk incidents occurred over the year, whilst this is a slight increase on the previous year (8), it is the result of larger work projects taking place, and is down from a peak of 36 sites in 2007 due to our ongoing removal and remediation works. The majority of these incidents were in rooms or areas that were sealed off. 1.61 tonnes of asbestos was removed through 23 removal projects, with a further 5 projects undertaking encapsulation and repair.

159 surveys were completed as part of our annual re-inspection visits and pre project surveys to identify potential risks prior to works. Project specific advice was provided on 35 occasions as part of the pre-construction information required under the Construction Design and Management (CDM) Regulations.

Wellbeing

Wellbeing is recognised as increasingly important to help staff manage SAD. In recognition of the proactive and reactive work undertaken to help employees achieve a healthy lifestyle, the Brigade was awarded 'Achievement' status of the London Healthy Workplace Charter. Further to this the 'Blue Light Time to Change Pledge' was signed, demonstrating the Brigade's commitment to challenge mental health stigma and promote positive wellbeing within the service. Other initiatives to support wellbeing include:

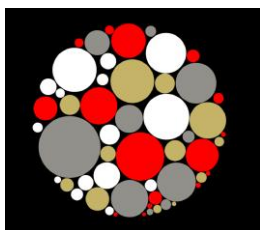
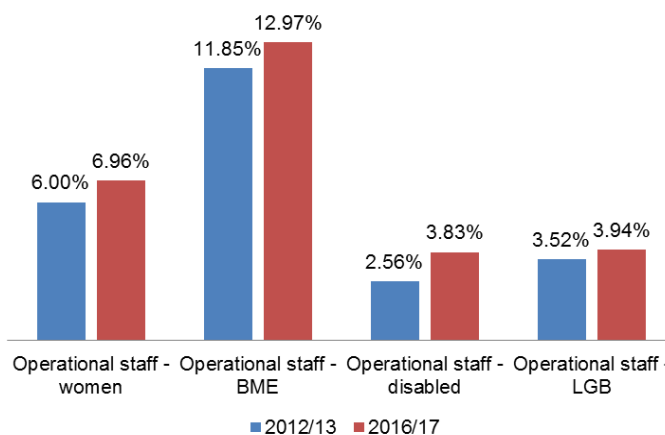
- The 'Health matters' portal providing information on healthy lifestyles, including mental wellbeing.
- The review of our managing stress policy introduced new guidance, a workplace stress questionnaire for staff experiencing stress at work to complete, and risk assessment for managers.
- The occupational health service that supports employees with acute and chronic medical conditions.

3 Equalities and Social Inclusion

Developing a diverse and inclusive workforce, supported by a diverse and inclusive supply chain, serving diverse communities

✓ **Equality Framework²: Excellent rating**

We know that an inclusive organisation is one that has a diverse workforce at all levels and across all staff groups, thereby creating safer and more effective teams. We monitor and consider opportunities to improve inclusion across all staff groups. As a snapshot our 5 year trend for operational staff, our largest staff group on race, gender, disability and sexual orientation demonstrates our efforts continual to deliver gradual improvement.

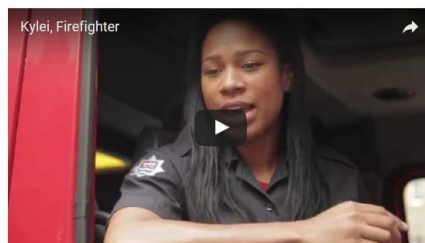


Our new 10 year Inclusion Strategy – Safer Together was published in June 2016, setting out a fresh look at equality, diversity and inclusion for the Brigade, in order to deliver a step change in our performance. To help meet our aims early actions included providing financial support to staff support groups, establishing an Inclusion Board to monitor progress, and starting work on a new behavioural framework to underpin our new approach.

Having a workforce more reflective of London's population improves the operational effectiveness of the Brigade through its understanding and responsiveness to London's increasing diversity, particularly in the context of community engagement. Recruitment of fire fighters remains our biggest opportunity to diversify our workforce. The increase in successful BME applicants resulting from the local residency requirement continued in 2016, although there was an overall reduction in total applicants, thought to be in part due to this and new criteria on qualifications required. Whilst the proportion of applicants from diverse groups remains higher than the respective proportions of our actual workforce, they remain far short of the diversity levels in London. Targeted pre-selection skills workshops continue to be provided to support under represented groups to prepare for the selection process.

Challenging perceptions

We have increased our use of social media to market our recruitment campaigns to women aged 18-40 in London who are interested in fitness and sports that are more likely to enable them to be successful at the physical tests required. Research has shown that groups such as women often have an incorrect perception of the role of a fire fighter. Using written and video case studies, our campaigns now highlight areas of work that are lesser known to the public such as the wide range of community outreach and educational work.



² The equality standard and national equality framework are under review.

Work has commenced on developing the first operational apprenticeship, which has the potential to provide a further avenue to becoming a fire fighter. This could provide an entry route for those in our cadets scheme, which has been successful at attracting young people from diverse backgrounds to move on to potential employment opportunities. This could also enable full recovery of our apprenticeship levy contributions.

Supplier Diversity

✓ **SME Invoices paid in 10 days: 99.82%**

✗ **Spend with SMEs: 21.1%**

As our processes to promptly pay SME invoices have been in place for sometime and continue to deliver consistently high performance, our focus has shifted towards monitoring the prompt payment of SME invoices by our key suppliers. This has tended to show a greater degree of variability in performance, with some suppliers reporting for as high as 83 per cent prompt payment in a quarter, and others quarters as low as 48 per cent.

SME spend performance has dropped considerably from previous years. This reduction correlates with the end of the PFI station build programme, which delivered considerable indirect SME spend on construction over the past two years. As the project has now moved to the facilities management phase, SME spend has dropped as expected.

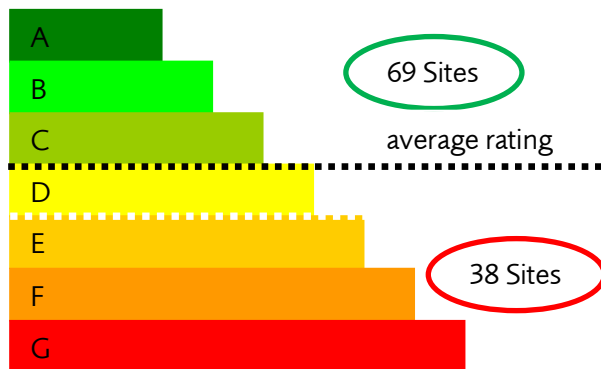
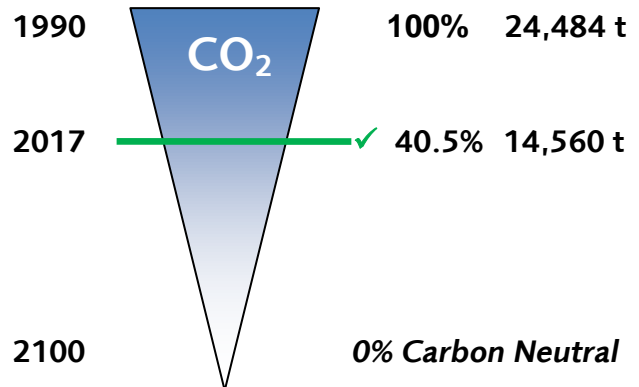
4 Environment & Climate Change

Reduce our CO₂ emissions by 45 per cent from 1990 levels by 2020

✓ CO₂ reduction from 1990 levels: 40.5% ▼

✓ Onsite renewable energy generation: 7.25% ▲

Our aim is to continually reduce our carbon, focussing on the key emissions we can control from our buildings and fleet, whilst continuing to indirectly influence a reduction in emissions throughout London with our continued work on prevention protection from fires. Our overall CO₂ emission increased from the previous year, in part due to one off events. We still expect to achieve our 2020 target of 45 per cent reduction.



Buildings remain our largest source of emissions (70%), with their Display Energy Certificate ratings providing a measure of improvement. Whilst the overall ratings improved, with a further 2 sites moving into the A-C rating, there was an overall increase in emissions of some 4 per cent. This was primarily due to our newest stations, which, whilst being built to BREEAM Outstanding, are larger in size to provide flexibility for the future and therefore consume more energy.

Works to improve energy efficiency on stations continue to deliver substantial savings on our bills, saving £704,677 in 2016/17. We now have LED lighting at 80 per cent of our premises. Further combined heat and power generation, windows replacement, heating controls and Photo Voltaic cells.

Our onsite renewable energy generation increased to 7.25 per cent with a further 12 Photo Voltaic installations. Combined our renewable installations generate some £56.5 k in income through:

- 61 Photo Voltaic (PV) arrays
- 45 Combined Heat and Power (CHP) generators
- 15 solar thermal installations
- 2 ground source heat pumps
- 2 biomass units
- 1 wind turbine

BREEAM Outstanding

The last 2 fire stations being rebuilt under the Privately Financed Initiative opened at Shadwell and Dockhead, also achieving the BREEAM Outstanding rating. Low carbon measures included solar panels, combined heat and power units, roof lights and sun pipes for natural light, natural ventilation, a high degree of insulation and covered cycling bays included as standard. Both sites include brown roofs improving local biodiversity.



In August 2016 we rolled out a fleet of 57 electric cars, making us one of the greenest Brigades in the country. Operational staff use these vehicles to attend emergency incidents and other Brigade business across the capital.



Having future proofed our estate by installing electric vehicle chargepoints across 75 per cent of sites, their usage has gone up from 28 sites in 2015/16, to all but one point being used for charging in 2016/17. The majority of the charging activity (78 %) is from our own electric fleet cars, that have delivered considerable reductions in fuel use (~93%) compared to the vehicles they replaced. We expect to see the gain from these in next years performance, as our fleet emission increased (up 35%) due to an overall increase in vehicle movements, primarily as part of our 150 year celebrations, which included considerable use of a vintage fire engine right across London. Carbon emissions from our grey fleet also increased by 10.9 per cent compared to last year, which may have been in part attributable to the 150 year celebrations.



We were one of the first 11 organisations to be awarded the status of a 'Go Ultra Low Company', by committing to Electric Vehicles making up at least 5 per cent of our fleet by 2020. We have now achieved 12 per cent with our cars and are now looking at other areas of our fleet to move to ultra low. Whilst this will be challenging for our frontline fire engines, we are already moving them over to cleaner Euro 6 engines that meet the upcoming Ultra Low Emission Standard. The first of our new vehicles went on the run at Leytonstone last January, with 14 replaced by the end of 2016/17. The new vehicles have a range of improvements including a high pressure hose that can deliver twice as much water helping firefighters to tackle fires more effectively, improved visibility for other road users in low light.

Our air miles increased by 55 per cent to 840k from 329k, whilst our emissions levels increased by 30 per cent, to some 112 tonnes of CO₂. We continue to offset carbon emissions from our air travel, that are through Gold Standard certified emission reductions projects registered through the United Nations Clean Development Mechanism. The distance from domestic journeys has more than doubled from the previous year, largely as a result of the Brigade hosting the National Operational Guidance project that undertakes considerable travel between UK fire services.

Further environment and climate data is detailed in [Appendix A](#).

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

We respond to events of extreme weather that continue to increase in frequency and severity as a result of climate change. Storms and flash flooding from heavy rain can double or even triple the number of calls to our control centre as evidenced twice in June 2016. We attended 6,674 storms/flooding incidents in 2016/17, up 5 per cent on the previous year and 3,479 grass fires, which accounted for 17 per cent of all fires, up from 5 per cent of all fires in the previous year or 3 per cent of all incidents.

Our flood response capability has also been used many times to support a national response to numerous flooding-related incidents. This has included many rescues, evacuating vulnerable people from their homes and protecting vital infrastructure, such as water pumping stations and telephone exchanges. As a result our response capabilities for climate change related emergencies was identified as an area of focus for our London Safety Plan. Planned activities cover the provision of Personal Protective Equipment for floods for frontline crews, the purchasing and mobilisation of flood prevention equipment in collaboration with local authorities and the Environment Agency, community safety activities to assist with flood awareness and preparation and the number of London Fire Brigade national flood advisors.

Protect the environment from harm through emergency response and delivery of our service

Saving life is our priority when we manage incidents. Protecting the environment from harm is also an important part of what we do. This includes keeping our drinking water safe by preventing hazardous materials from polluting waterways from fuel spills or polluted fire water run off, and protecting the habitats of protected species. We sent our 40 Hazardous Materials & Environmental Protection Officers (HMEPO) to 526 incidents that required specialist skills and advice, against some 5,409 suspected hazmat incidents. We continue to work with partner agencies such as the Environment Agency, UK Spill Association and other Fire and Rescue Services, to improve our approach to responding to these types of incidents and deliver environmental protection training to all station managers to improve their awareness of the environment risks on our premises and at incidents.

We recognise the importance of external verification and assure the high standard of our approach through our certified environmental management system. We are working towards the new 2015 ISO 14,001 standard, and indications are we are on track to achieve this at our next audit. Our 12 highest risk stations for the environment are closely monitored with 3 now demonstrating an Excellent degree of control over environmental risks. Our Departments continue to manage their risk to a good standard.



EMS Certificate No. 611954

			Degree of Control	Stations*	Depts.*
High	5		← Excellent	3 ▲	1 ▶
	4		← Good	7 ▼	13 ▶
	3		← Minimum Acceptable	2 ▼	3 ▶
	2		← Poor	0	0
Low	1		← Unacceptable	0	0

*Arrows show direction of travel against the previous year and denote this as positive or negative by the colour.

Our water use decreased a further 0.6 per cent from the previous year, attributed to the trial of waterless urinals and ongoing efficiency improvements through our REFIT programme.

Whilst our innovative recycling of hose and donations of old fire kit to fire and rescue charities continues to perform well, our mixed recycling performance has dropped substantially to 54 per cent. With a drop in the value of recyclable materials it is no longer viable for our supplier to offer a second sort of recyclables incorrectly placed into waste bins and our performance has dropped accordingly.



Fire Fighters Charity Donations:

- £8.2k**
 - 0.84 tonnes of work wear
 - 37.2 tonnes of textiles collected from 8 public charity bins hosted at our stations
- £13.8 k**
 - 5.9 tonnes of waste hose used to produce handbags, luggage, corporate gifts and belts

Environmental regulatory changes relevant to the Brigade and our response are detailed in [Appendix B](#).

5 Economic Value

Support skills and employment for Londoners through the provision of apprenticeship opportunities



3 Brigade apprenticeship starts, 13 through contracts



29 Job starts through our contracts

Another 3 business administration apprenticeships were started, with 18 of the 22 apprentices successful in gaining permanent positions within the Brigade to date. We are working with the national trailblazer groups to develop fire sector apprenticeship standards (including Operational Firefighter) to provide a longer-term option to improve attraction and recruitment rates. Options to deliver apprenticeships within Operations, Fire Safety and Community Safety are also being considered.

Skills requirements continue to be included in key contracts with significant spend, where we have the opportunity to influence the supply chain. Skills and employment opportunities have been included in our contracts for some 5 years, delivering 173 job starts and 27 apprenticeship starts in that time.

Support businesses in understanding the economic impact and risks of fire and encourage businesses to undertake contingency planning

Our protection work aims to reduce the considerable personal and commercial losses to businesses associated with fires and the impact on the surrounding community. As efforts to recycle increase, so the waste and recycling industry continues to grow, with these facilities posing significant risk to the local community. We continue to carry out Joint Visits to Waste Sites with other agencies, proactively targeting sites of concern and reactively post incident. Working with other Enforcement Agencies and partners within the Waste Industry we:

- Met to discuss incidents, arrange joint training and look at ways we can improve our collaborative working.
- Supported other Fire and Rescue Services and the Environment Agency (EA) across the UK to work collaboratively.
- Helped develop National Operational Guidance on Waste Site Fires.
- Supported the revised fire safety advice for the Waste Industry Safety and Health (WISH) Forum.
- Promoted collaborative working between the enforcement agencies and the waste industry at events across the country.
- Provided training for our operational and fire safety staff on the waste industry and its risks.
- Provided fire safety input into Waste Industry accredited training courses.
- Have undertaken research to better understand the fire behaviour of common waste materials.

Continually improve the social value obtained from the public money we spend

- **Contractors staff paid the London Living Wage: 162**

- ✓ **Mayor's financial savings target: 11.5m**



responsible procurement

Working in partnership with the other organisation's of the Greater London Authority, we have been working on a refresh of the GLA Groups Responsible Procurement policy. This will bring the policy up to date with the current Mayoral programmes and priorities and bring it inline with recent changes to legislation. The focus remains delivering improved quality of life and better value for money by using sustainable procurement to open up access to contract opportunities for London's diverse businesses, encouraging improved practices with our suppliers and promoting greater environmental sustainability to make London a better place to live and work.

Our ethical sourcing guidelines have identified our key areas of risk for Modern Slavery and set out our policy approach to addressing the risk. Our core approach is to require high risk suppliers to comply with the Ethical Trade Initiative's Base Code, monitoring those with contracts of considerable value. For more moderate risk areas we look to specify compliance with appropriate certification standards where possible, such as FairTrade and Marine Stewardship Council for food. Awareness raising sessions have been conducted with key procurement staff to ensure they understand our procedures and the wider issues. Our key risks areas of spend are defined below. Ethical sourcing requirements have been included in our fleet maintenance, workwear, IT hardware and PPE contracts to date.

High risk	Electronics, textiles, construction materials
Medium risk	Food and Drink, cleaning products and chemicals, timber products



As members of the Social Value Task Force we have been working collectively with leaders in central and local government and business to develop tools to support the implementation of the Public Services (social value) Act 2012. The Social Value Maturity Index self-assessment released in September 2016, helps the public and private

sector to identify their progress on implementing the aims of the act as a Follower, Mature, Leader or Innovator, and set an action plan for improvement.

6 Ensuring that sustainability runs through all our activities

Support our staff to ensure that sustainability runs through all our activities

- A level projects³ completing SDIAs: 82% ▲
- Policies completing SDIAs⁴: 100% ▲
- Green Champions: 278 ▲

The successful 'Greening the Workplace' pilot presentation delivered by a fire fighter was expanded across all stations, delivering 430 presentations over 18 months. Highlighting practical steps everyone could take to reduce their environmental impact, it led to a considerable increase in interest and activity on environmental issues and rise in green champion numbers. Subsequently a new Green Champions Coordinator post was created to enhance support to staff.



We supported the annual Earth Hour celebrations in March, asking staff to switch off all non-critical lights at stations and to 'pass the panda' to raise awareness. Our Commissioner took the lead, passing our Panda 'Eddie' to our Control centre staff, then visiting Lambeth river station crews, and New Malden fire station.

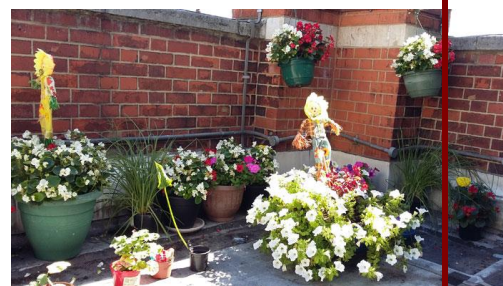
Green Impact



New Malden's blue watch won our Greenest fire station award, creating a wildlife garden using recycled or donated materials and establishing a teracycle community drop off point at the station for hard to recycle items. Our Emergency Planning Team won the top award for office teams, creating a switch off campaign, a team swap shop, raising money for charity, and delivering environmental talks. The winners were presented with their awards as part of the naming ceremony of Braidwood Forest at Ingrebourne Hill, where 150 trees were planted as part of our 150 years celebrations in recognition of the historical use of timber by the fire service.

Brigade in Bloom

With some 52 stations creating or re-establishing gardens following the Greening the Workplace presentations, our Brigade in Bloom competition was instigated encouraging gardens supporting pollinators and food growing. Awards were given for the best new garden in each of our four areas and overall Best Garden: Hillingdon Fire Station; Best Wildlife/Food garden: New Malden Fire Station; and Best Small garden: Headquarters balcony.



³ Strategic projects with an A level governance

⁴ Sustainable Development Impact Assessments

Governance and Reporting

Sustainable development continues to be addressed in our governance processes by:

- maintaining a Director level champion;
- identifying sustainability implications in committee reports;
- quarterly reporting on sustainability indicators;
- reporting annually on sustainable development to Committee and publishing the report on our [website](#);
- consulting with Departments through our sustainable development and responsible procurement working groups; and
- Corporate Management Board (CMB) providing the Management Review Function for our EMS.

Sustainable Development Impact Assessments (SDIA)

We continue to assess the sustainability impacts of the Brigade's policies and corporate projects through and SDIA process. Whilst we have simplified the process to streamline the approach and achieve high levels of completion, it still provides assurance that the Brigade is meeting its legal obligations, and complying with Brigade and Mayoral targets, policies and strategies to reduce environmental impact. This forms part of the controls of our EMS.

Appendix A: Environmental Data Summary

Buildings Energy Use Data	2012/13	2013/14	2014/15	2015/16	2016/17
Actual cost of energy (£m)	2.82	2.25	2.06	1.938	1.34
Total energy consumption (GWh)	48.38	40.91	38.32	34.95	38.24
Total floor area (m ²)	165,335	189,544	186,764	185,565	181,652
Total energy consumption (kWh/m ²)	261.04	215.84	205.21	188.34	210.49
Electricity (GWh)	14.36	13.06	12.85	9.21	12.99
Gas (GWh)	34.0	27.78	25.47	22.91	25.24
CO ₂ (t)	14,013	11,441	11,064	9,802	10,180
Onsite renewable energy generated %	4.00	4.19	5.65	6.92	7.25
CO ₂ reduction from buildings from 1990 % ⁱ	-26.40	-38.08	-38.62%	-45.62	-44.58
	(-31.38)				
Building Energy Ratings	2012/13	2013/14	2014/15	2015/16	2016/17
A	0	0	0	2	1
B	5	6	8	9	13
C	37	60	61	56	54
D	20	35	21	27	31
E	6	10	10	9	7
F	2	2	3	3	3
G	3	3	2	1	1
Not rated	49	0	0	0	2
Fleet Data	2012/13	2013/14	2014/15	2015/16	2016/17
Total No. LFEPAs vehicles	544	518	514	508	467 ⁱⁱ
Total diesel fuel used by LFEPAs frontline fleet (Mlitres)	1,311	1,312	1,143	1,158	1,563
% non road vehicles		3.47	1.56	1.57	3.85
% Pre-Euro to Euro II ⁱⁱⁱ		4.06	4.48	4.53	0.86
% Euro III		66.22	66.34	65.95	61.24
% Euro IV		23.55	22.18	22.44	9.21
% Euro V		2.70	5.45	5.51	8.99
% Euro VI					15.85
Frontline fleet CO ₂ Emissions (t)	3,492	3,532	2,988	2,985	4,071
% Ultra Low Emission Vehicle					12.21
Fleet Cars EV charging CO ₂ (t)					14
Grey fleet miles	1,534,335	1,037,351	684,561	617,963	688,459
Grey fleet CO ₂ emissions (t)	487	306	202.3	183.6	203.6
Air Travel	2012/13	2013/14	2014/15	2015/16	2016/17
Miles Travelled	392,200	480,747	302,653	329,169	839,669
CO ₂ from Air Travel (t)	142 ^{iv}	173	75	86	112
Total CO ₂	2012/13	2013/14	2014/15	2015/16	2016/17
Total CO ₂ (t) ^v	18,134 (16,456)	15,452	14,352	13,057	13,435
Total CO ₂ reduction from 1990 %	-26.21	-36.89	-39.39%	-46.67	-40.51
	(-32.79)				

Water use in buildings	2012/13	2013/14	2014/15	2015/16	2016/17
Water Consumption (m ³) ^{vi}	130,186	119,385	105,906	94,849	94,277
Waste & Recycling	2012/13	2013/14	2014/15	2015/16	2016/17
Mixed recycling (t)	1,112	1,233	1,038	671.6 ^{vii}	422.1
Food waste recycled (t)	3.21	19.87	14.13	12.00	80.0
Waste to energy (t) ^{viii}	0	12.40	19.89	16.30	424.0
Waste to landfill (t)	443	0	0	2.99	2.8
Batteries recycled (t)	0.99	1.57	1.66	2.6	2.0
Textiles recycled (t)	1.4	2.32	4.08	1.20	1.98
Mobile phones recycled (volume)	0	0	0	925	0
Toner cartridges (volume)	4020	1572	0	1775 ^{ix}	995
Hose recycled (t)	5.0	3.7	3.9	3.6	
Recycling rate (%) ^x	74.79	99.01	98.22	95.6	54.05
Total Waste produced (tonnes) ^{xi}	1,673	1,273	1,082	722.3	929.0
Environmental Incidents	2012/13	2013/14	2014/15	2015/16	2016/17
Significant Spills	0	0	0	0	0
Near misses recorded at our premises ^{xii}	0	4	0	0	2
Compliments and Complaints	2012/13	2013/14	2014/15	2015/16	2016/17
Corporate Compliments		0 ^{xiii}	0	0	0
Corporate Complaints		0	0	0	0

ⁱ CO₂ emissions are reported as absolute figures. In years where exceptional weather conditions skew the figures negatively, both absolute and weather corrected figures (in brackets) are provided to demonstrate the benefit of energy efficiency measures installed. This is a practice recognised by the Carbon Trust and is based on extrapolation of the weather correction of gas and electricity consumption.

ⁱⁱ Vehicle reductions are due to a review of requirements for fleet cars, support vehicles, national resilience vehicles, skid training and previously approved reductions of pumping appliances.

ⁱⁱⁱ Figures are based on engine standard on registration only and do not reflect any modifications.

^{iv} CO₂ for air and total amended to pick up error in air emission reported,

^v We report direct and indirect emissions from our buildings, fleet and air travel in line with the Greenhouse Gas Protocol (GGP) and the Mayors Climate Change Mitigation and Energy Strategy.

^{vi} All water consumption reported is from utility supply, 10 fire stations closed at the start of quarter 4 in 2013/14 leading to a reduction in consumption in both 2013/14 and 2014/15.

^{vii} Previous year incorrectly included combined recycling and food waste.

^{viii} Waste and recycling for our Control centre is managed under a separate contract to our other sites and includes waste to landfill, data for this site was only identified for inclusion from 15/16.

^{ix} Used toner cartridges were stored for recycling during 2014/15, with a collection arranged during 2015/16,

^x Our recycling rate refers to tonnes recycled through waste and recycling contracts for our premises, tonnes of other items recycled e.g. batteries are considered too low to include.

^{xi} Total waste produced includes all materials for which we have weight based data.

^{xii} A near miss recorded on our premises is were a minor spill occurred and was contained

^{xiii} Reporting introduced in 2013/14, this does not include any compliments or complaints received directly by departments and is specific to the environment theme.

Appendix B: Sustainability Legislation Changes

Below are details of the changes to legislation for 2016/17 with relevance to sustainable development and the Brigade.

Legislation	Action taken
<p>Water Act 2014 and Commencement Orders</p> <p>This Act reforms the water industry market by increasing choice in the retail market by allowing all business, charity and public sector customers to choose their water and sewerage supplier for the first time, and enable multi-site operators to tender for one supplier across Great Britain.</p>	<p>LFB's water provider changed from Thames Water to Castle Water.</p>
<p>The Hazardous Waste (England and Wales) Regulations 2005 as amended</p> <p>The 2005 Regulations require premises at which more than 500kg of hazardous waste is produced at, collected at or removed from annually to be notified to the Environment Agency by the waste producer. When notified, the Environment Agency issues a premises code which is currently used as part of wider measures to track hazardous waste consignments. The 2016 regulations revoke this requirement as the waste producer no longer need to notify the Environment Agency.</p>	<p>Nil action required.</p>
<p>The Energy Performance of Buildings (England and Wales) Regulations 2012 as amended</p> <p>These Regulations amend fees for entering data onto the register of energy performance certificates, display energy certificates and air conditioning inspection reports.</p>	<p>Nil action required.</p>

Appendix C: Global Reporting Initiative index

This report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines.



















Application of the GRI 'Guidance on Defining Report Content', 'Defining Report Quality' and the associated principles	
Materiality	Information provided within this report reflects our performance against the topics and indicators where we have identified our activities as having potentially significant economic, environmental, and/or social impacts. This is based upon our Sustainable Development Framework and associated strategy. Our review of materiality continues.
Stakeholder inclusiveness	We consider our primary stakeholders to be the members of our Authority, the Department for Communities and Local Government, the Mayor of London, the functional bodies of the Greater London Authority, the London Boroughs, and other Fire and Rescue Services in England and its associated organisations. The contents of this report is approved by our Authority, following this it is published in our website and we invite feedback on the issues presented here. Details of our community engagement and partnership working can be found in our London Safety Plan and throughout this report.
Sustainability context	The broader context for addressing sustainability and our key impacts is provided throughout the report, including consideration of future challenges, risks and opportunities.
Completeness and balance	This report aims to provide a complete and balanced representation of sustainability performance across the organisation, for the defined reporting period.
Comparability	Performance data is provided for a number of years, which allows for comparison over time and identification of trends. Application of the GRI guidelines will enable comparisons to be made with other organisations who report using the GRI framework.
Accuracy and reliability	Actions within the Sustainable Development Strategy that are reported on here are monitored through our Performance Management Framework and progress is reported annually to our Corporate Management Board.
Timelines	Sustainability reporting for London Fire Brigade takes place annually.
Clarity	Information is presented in a range of formats, e.g. narrative, data, graphically, in order to make the report understandable and accessible to a range of stakeholders using the report.




Compliance with GRI Guidelines – Profile disclosures

Code	Profile Disclosure Description	Location or description
Organisational profile		
G4-1	Statement from the most senior decision maker	Pg 5
G4-3	Name of the organisation	London Fire Brigade
G4-4	Primary brands, products, and services	About us
G4-5	Location of organisation's headquarters	London SE1 0LL
G4-6	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	About us
G4-7	Nature of ownership and legal form	About us
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	About us
G4-9	Report the scale of the organisation	About us
G4-10	Report the total number of employees by employment contract and gender	Workforce profile for 2013-14
G4-13	Significant changes during the reporting period regarding size, structure, ownership, or supply chain	Statement of Accounts 2016-17, About us
Report Profile		
G4-28	Reporting period (e.g., fiscal/calendar year) for information provided	2016-2017 financial year
G4-29	Date of most recent previous report (if any)	2015-2016 Annual Report
G4-30	Reporting cycle (annual, biennial).	Annual
G4-31	Contact point for questions regarding the report or its contents	Environment@london-fire.gov.uk
G4-32	This report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines	No external assurance provided
Governance		
G4-34	Governance structure of the organisation, including committees under the highest governance body. Committee responsible for decision-making on economic, environmental and social impacts.	About us, Resources Committee
G4-35	Process for delegating authority for economic, environmental and social topics from the highest governance body to the senior officers and other employees	Standing Orders
G4-36	Appointment of a director level position with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	Environmental Policy
G4-38	Composition of the highest governance body and its committees	LFEP Authority members
G4-39	Highest governance body's role in reviewing the effectiveness in risk management processes for economic, environmental and social impacts	Risk management Strategy 2014-2017
Ethics and Integrity		
G4-56	Organisations values, principles, standards and norms of behaviour such as codes of conduct	What we do
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behaviour, and matters related to integrity	Fraud & counter fraud response plans

G4-58	Internal and external mechanisms for concerns about unethical or unlawful behaviour, and matters relating to organisational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	Whistleblowing policy
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Compliance with GRI Guidelines – Performance indicators

	Full reporting		
	Partial reporting		
Code	Performance Indicator	Location or description	Full or part reporting
Economic			
G4-EC1	Reports direct economic value generated and distributed (EVG&D)	Statement of Accounts 2016-17	
G4-EC4	Financial assistance received from government	Statement of Accounts 2016-17	
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of Operation	P 19	
G4-EC8	Significant indirect economic impacts, including the extent of impacts	P 19	
Environment			
G4-EN3	Energy consumption within the organisation	P 23	
G4-EN4	Energy consumption outside of the organisation	P 23	
G4-EN6	Reduction of Energy Consumption	P 6, 23	
G4-EN8	Total water withdrawal by source	P 24	
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity Action Plan 2015-2018	
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Biodiversity Action Plan 2015-2018	
G4-EN13	Habitats Protected or restored	Biodiversity Action Plan 2015-2018	
G4-EN23	Total weight of waste by type and disposal method	P 12, 24	
G4-EN24	Total number and volume of significant spills	P 24	
G4-EN30	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	P 23	
Social			
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Workforce profile for 2013-14*	
G4-LA6	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Our Performance 2013 - 2014*	

G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	P 19	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Workforce profile for 2013-14	
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments and development programs	P 8, 21	
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Fraud Response Plan and Counter Fraud Strategy	