

# London Fire and Emergency Planning Authority

The London Fire and Emergency Planning Authority (LFEPA) operates the UK's biggest fire and rescue service. With 7,000 staff, including 5,800 firefighters and officers, the London Fire Brigade (LFB) is also the world's third largest fire service (after New York and Tokyo).

Serving a Greater London population of more than 7.5m, its 113 fire stations cover an area of nearly 617 square miles.

## Overview

Most of the authority's procurement expenditure, which this year will amount to around £94.5m, goes on operational and personal protective equipment for firefighting. It does not include a Private Finance Initiative project, under development, to rebuild nine fire stations.

Among the UK's fire services, the LFB has taken a lead in embedding responsible procurement principles and practices into its buying procedures. It is the only fire service to reach Level 5 of the Government's Sustainable Procurement flexible framework, an independently audited assessment of sustainable procurement practices. And it has been instrumental in establishing a network

on sustainability, including responsible procurement, among other fire services.

In 2009 the LFB won the Procurement Process award for the Mayor's Green Procurement Code, which encourages organisations in the Capital to reduce their environmental impact through responsible purchasing. It was also highly commended in the Measurement and Results categories. With a change in the award categories this year, the brigade, as part of the GLA Group, was again highly commended.

Internally, the LFB measures its performance on sustainable buying processes every three months as part of broader performance indicators, and a working group focuses on implementing its responsible procurement commitments.

## LFB by numbers

- Third biggest fire brigade in world
- 5,800 firefighters
- 113 fire stations
- Covers 617 square miles
- £94.5m spent on firefighting equipment

**Case study**

## London Fire Brigade: The case for going green

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London's fire engines may be red but its fire brigade is getting greener by the day.

Environmental sustainability and energy efficiency are key aspects of responsible procurement, and LFB has been paying increasingly close attention to them.

In fact it has been recording its energy use for 20 years, enabling it to calculate carbon emissions from its buildings and develop a 1990

footprint. More recently it has extended its data gathering to include other sources such as vehicles and air journeys. Buildings, however, are the main source of emissions and have therefore been the main focus of attention.

In those 20 years, emissions from LFB's buildings have reduced by 18 per cent and its overall footprint is down by 20 per cent, despite an increase in vehicles and fire stations and opening new headquarters.



## LFB case study

The financial and environmental benefits are clear. Since it began focusing on energy efficiency, LFB estimates it has saved more than £1.6m. In 2009/10 alone its low-carbon projects netted savings of £260,000.

With so many buildings of different age, size and quality, the brigade recognises it needs more than one approach to energy efficiency. One significant project is the Mayor's energy-saving programme, RE: FIT – previously the Building Energy Efficiency Programme.

Under this scheme LFB appointed a contractor to audit sites and design, install and manage energy-saving improvements at 10 fire stations on a 10-year contract. The installations, including solar panels, motion-sensor lights and energy-efficient boilers, have now been completed and are expected to result in a saving of more than 240 metric tonnes a year of CO<sub>2</sub>

from a near 40 per cent reduction in electricity consumption, worth around £50,000 a year.

The scheme also includes a guaranteed payback from the contractor if savings are slower than forecast, ensuring the most effective measures are designed in.

In terms of carbon emissions, the savings ranged from 11 per cent at Romford to 44 per cent at Ilford, with most stations averaging 23-30 per cent, depending on age, size and standard of building.

LFB is the first participating organisation to complete its initial wave of RE: FIT buildings and has now identified 10 more for the next phase.

The brigade is also now into the second phase of an 'invest to save' programme of energy-efficiency measures. Under this programme, improvements to heating, lighting, plumbing



The Mayor and Ron Dobson, LFB Commissioner, inspect a solar panel on the roof of Ilford fire station

and building insulation are procured using government buying standards or better, leading to savings in energy and water bills which are then ploughed back for further improvements.

In 2009/10, LFB re-invested £54,000 into its Energy Efficiency Revolving Fund as well as £113,000 to its Salix Fund, a Carbon Trust scheme that supports energy initiatives in the public sector. Since 2007, the brigade has reinvested £480,000 through revolving funds.

One innovative application of the brigade's Salix funding has been at Bromley fire station, where it has invested just under £1,400 to upgrade the lighting with light emitting diode (LED) lamps. Previously, payback periods made LED lighting unsuitable based on whole-life costs, but as the technology has developed so the costs have come down. At Bromley, LFB calculates the lamps will save more than 2,600kW hours a year

– equivalent to 1.43 metric tons of CO<sub>2</sub> – worth £289 and giving a payback of 4.8 years. Over their lifetime – deemed to be 13 years by the Carbon Trust – the lamps will yield savings of £3,416 at current electricity prices.

The combination of measures adopted by LFB means it has already met its aim of reducing carbon emissions by 20 per cent by 2012. Now a target of 25 per cent has now been set for 2015 – higher than the Mayor's goal of 22 per cent, but one that Nicole Fletcher, Head of Sustainable Development, and Ian Shaw, Environmental and Energy Officer, believe is worth aiming for.

'With the likelihood of cuts in the current economic climate, we have to be realistic,' says Ian. 'But if we get to this level earlier – and we hope we will – then we will set ourselves another new target.'



**Top left:** The Biomass boiler at Croydon

**Bottom left:** The photovoltaic roof at Sidcup

**Above:** Inside of the biomass boilers at Croydon