



Introduction

The Metropolitan Police Authority (MPA) is a functional body of the Greater London Authority (GLA) and oversees the delivery of effective policing in the capital through the Metropolitan Police Service (MPS) which manages over 55,000 police officers and support staff and a large Estate of approximately 900 buildings. With half-hourly metered consumption of approximately 160,000 MWh per annum, the organization falls comfortably within scope of the CRC Energy Efficiency scheme. Corresponding carbon emissions from buildings are in the order of 125,000 tonnes CO₂ per annum. An initial assessment suggested that the MPS's CRC liability for energy consumption in the 2010/11 financial year would be approximately £1.5m.

As part of the GLA Group, the MPS supports Mayoral strategies and initiatives aimed at energy efficiency and carbon emissions reduction. Energy and carbon emissions data have been published in the Annual Environment Report since 2001/02 and from 2011 onwards will be published in the Annual Corporate Social Responsibility (CSR) Report. The MPS has also published both short and long term targets for carbon emissions reduction.

The Climate Change Action Plan (CCAP) programme was established specifically to address energy efficiency retrofit of the Estate and to deliver carbon emissions reduction. In addition, rationalization of the estate, environmental awareness as well as construction and major refurbishment projects, etc, all contribute to energy efficiency (the latter through the application of standards set out in the MPS's Sustainable Building Project Design Guide).

The MPS is frequently at the forefront of trialing new technologies, procurement routes, etc, and in 2009/10 for example, the MPS piloted the RE:FIT procurement framework (formerly the Building Energy Efficiency Programme, BEEP) at 10 sites delivering retrofit works forecast to achieve savings of over 2,000 tonnes CO₂.

Since energy / carbon management was well-established within the MPS, the capability already existed through the work of the CCAP and energy management teams to support the MPS's CRC Energy Efficiency Scheme submission by adapting and building on existing monitoring and reporting protocols. These teams also provided the expertise to apply the CRC guidance to the specific circumstances of the MPS estate. Given the MPS's significant utility budget, proprietary energy management software has been in use for some time and the energy management database provided the primary data source for the MPS's CRC assessment.

Although the MPS Estate large, it is characterized by a relatively smaller number of large sites such that the 45 largest sites contribute around 70% of the total building carbon emissions. The CRC's 90% emissions rule has required the MPS to put greater emphasis on capturing more accurately the energy consumption of even the smallest sites owing to the need to define 100% of consumption in order to confirm that core supplies contributed greater than 90% of consumption (core supplies were estimated at 90.7%). Consequently, although residual supplies were reported as part of the footprint, it was not necessary for the MPS to included residual supplies in the annual report. Given the nature of the MPS's business, residual supplies were largely restricted to profile class 1 - 4 electricity consumption, consumption via gas meters consuming <73,200 kWh annually, fuel oil, and some use of LPG.

In other aspects, application of the CRC guidance was generally quite straightforward. The organization's structure, for example, does not have the complications associated with subsidiaries, franchises, etc. Also, the MPS does not have any Climate Change Agreements (CCAs) or participate in the EU ETS. The majority of buildings are owner-occupied although there are several instances of, for example, landlord / tenant arrangements, PFI partnerships and residential classification.

In most cases, decisions regarding inclusion of energy consumption (or otherwise) for the purposes of CRC were straightforward since, in general, the energy consumer was responsible for the utility bills. The use of plug-in electric or hybrid vehicles required some exclusions to be made from the electricity supply although an analysis indicated that this element was insignificant. As the MPS estate includes section houses, it was necessary to account for the energy consumption associated with this category of estate building.

In order to contribute to Early Action Metric (EAM) performance, the MPS established a programme of rolling out voluntary Automatic Meter Reading and as a result, reported coverage of 64.2% of the total gas & electricity not covered by mandatory half-hourly metering. The MPS did not adopt the Carbon Trust Standard for the 2010/11 reporting period.

Due to the sheer number of documents that make up the Evidence Pack, the MPS developed an electronic document management system using the structure recommended by the CRC guidance. This was done to ensure ease of access especially for audit purposes. While there were considerable benefits associated with having in-house carbon and energy expertise, significant differences in the scope of reporting and methodology compared with other reporting protocols presented specific challenges. The additional degree of robustness required for CRC compliance will inevitably drive continuous improvement with regard to energy data management.

The CRC submission assessed the MPS's cost of CRC allowances at £1.43m. The ongoing CCAP programme work together with other initiatives (estate rationalization, environmental awareness, refurbishments, etc) will continue to contribute to energy, and therefore financial, savings associated with utility bills and our CRC liability. During 2010/11, retrofit was dominated by a series of energy efficiency measures installed at a number of the MPS's PFI sites and the Voltage Regulation Equipment programme, forecast to save an estimated 6,306 MWh and 2,508 tonnes of carbon annually.

CCAP retrofit investment decisions are based on payback considerations and the financial savings are re-invested through the Energy Efficiency Revolving Fund (EERF) set up especially for this purpose. While the utility savings alone are sufficient to justify the investment, the introduction of the CRC compliance provides added incentive to the CCAP programme.