

# Case Study

# John Laing

making infrastructure happen



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#### Client

**Metropolitan Police Service**

#### Locations

Lewisham Police Station  
Specialist Training Centre,  
Gravesend

#### Services include

Carbon Management

#### Term

25 years

#### Start

January 2004

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**Reduction of utility  
costs by £85,000 and  
CO<sub>2</sub> emissions by 465 tonnes  
in just eight months**

# Case Study



Martin Jameson,  
Compliance Director at  
John Laing Integrated  
Services said:

“The results of this work have been widely acknowledged by the Metropolitan Police. John Laing Integrated Services is committed to reducing carbon consumption across the Metropolitan Police estate and will be implementing these measures in three more police facilities.”

## The Client

**The Metropolitan Police Service is the largest police force in the UK, with a vision of making London the safest major city in England.**

John Laing Integrated Services provides a broad range of core and specialist services to a number of police stations in South East London, which are some of the most advanced in the country, as well as the Specialist Training Centre at Gravesend, which is the premier public order and firearms training facility in the UK.

## The Challenge

**Whilst energy consumption targets were contractual, these were not ambitious enough to meet the Metropolitan Police Service’s Climate Change Action Plan strategy for the reduction of energy consumption and carbon emissions.**

John Laing Integrated Services were commissioned to investigate all possible means of improving efficiency and produce the business cases for investment. The solutions would also need to be implemented without impacting upon the operation of the facilities, or their capability to provide essential community services.

## The Solution

John Laing Integrated Services engaged the services of their key partner, Concept Energy Solutions Limited, a carbon management consultancy with extensive experience of analysing building energy performance and developing effective solutions.

Detailed energy audits and data logging studies were carried out, in order to understand how energy was being used and to identify consumption profiles and any areas of inefficiency.

Reports were prepared which included a schedule of the most practicable initiatives and setting out the potential savings in energy, carbon and revenue costs, with details of the cost of implementation and the return on investment over time.

Recommendations were prioritised in a series of business cases in terms of the greatest carbon savings and the shortest payback, with the potential to re-invest the initial savings achieved in other initiatives over time.

## Innovation & Results

- **New lighting control technologies were introduced and linked to the building management system (BMS) to ensure that local lighting and air conditioning only operate when the room is occupied.**
- **LED lamp technology was introduced into the car parks to reduce consumption by around 70% and increase lamp life by 300%.**
- **A full review of control strategies on the Building Management System (BMS) was undertaken to ensure that all plant was being operated in an energy-efficient way.**
- **The majority of the work was done during office hours; the installation of all equipment was undertaken with no disruption to the operation of the police service.**
- **All aspects of the work were completed to specification and on time and savings were realised quickly following project approval.**
- **In the eight months since the measures were implemented (June 2010), energy consumption has reduced by 10% at Lewisham and 19% at Gravesend, with a total cost reduction of over £85,000.**
- **Further carbon reduction measures being considered include renewable technologies such as photovoltaic panels, which could generate electricity and take advantage of the Government's feed in tariff (FIT) scheme.**



## Case Study Snapshot

### The Challenge

- Reduce carbon emissions and utilities costs
- Identify solutions for investment

### The Solution

- Detailed energy audits undertaken
- Solutions identified based on cost benefit analysis
- Business cases presented

### Innovation & Results

- New technologies introduced
- £85,000 savings realised
- Carbon emissions reduced by 465 tonnes

# John Laing Integrated Services

**We focus on building strong partnerships and consistently delivering client objectives.**

John Laing Integrated Services (JLIS) provides a full suite of operational services to public sector clients, including local authorities, education, rail, police, fire and rescue, health and cultural services. We are also at the forefront of outsourcing for library services, being the only private sector organisation running and directly employing library professionals in the UK.

Our success is based on developing management solutions that enable our clients to focus on their core business, whilst delivering first class, front line services to their customers. By investing time and resources into ongoing value-added consultancy, we support our clients in the delivery of service solutions and innovations, whilst seeking savings for the longer term.

Our market-leading service and support centre, EQ24/7 is a powerful bespoke tool that allows us to maintain and improve the quality of our customers' services and assets. It also ensures contract terms, payment mechanisms and service level agreements are constantly monitored and met.

## Contact

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