

Thames Valley Police

www.thamesvalley.police.uk



“My main aim is to lower base load consumption. At the moment even a small unit, used as a public service office, has a high base load throughout the day and night. Lowering this minimum spend across the board would lead to huge annual savings.”

Neil Wickham,
Energy Manager,
Thames Valley Police

Thames Valley Police Capture Valuable Energy Data with a Hot Tip from IMServ

by Invensys Operations Management

Goals

- Implement an 11-site, multi-utility half hourly energy usage monitoring system;
- Analyze unexpected surges in consumption;
- Develop a plan to lower the energy expenditures;
- Reduce the carbon footprint of the police force;
- Validate energy bills.

Challenges

- Power usage varies from large police stations to remote hilltop sites;
- Seasonal changes create a variable usage pattern throughout the year;
- Police staff is unaware of the impact of individual usage.

Solutions and Products

- EDV Energy DataVision;
- IMServ BillVERIFY;
- IMServ DATAcollect;
- IMServ ENERGYbureau;
- IMServ METER.

Results

- Continue to serve the 2.1 million people in Thames Valley;
- Provide effective energy management for 220 buildings;
- Decrease base load consumption across all facilities;
- Anticipate and reduce consumption surges;
- Analyze data to plan and design future buildings for efficiency;
- Raise awareness of energy usage and consumption on an individual basis;
- Provide the ability to discover, validate and quantify opportunities for future energy reduction.



Thames Valley, England – Established on April 1, 1968, the Thames Valley Police are the largest non-metropolitan police force in England and Wales. Thames Valley is policed by 4,125 police officers, 3,397 police staff, 530 police community support officers, and 260

special constables, assisted by over 500 volunteers. Over 2.1 million people rely on Thames Valley Police. With over 196 miles of motorway to patrol, they cover more ground than any other police force in Britain.

In addition to fostering trust and confidence in their community, providing police services and developing their staff to provide the highest level of service, Thames Valley Police's stated strategic objective includes improving the use of resources. Their vast reach, covering five Basic Command Unit areas, requires a great deal of resources. Managing these resources is the responsibility of Neil Wickham.

"We operate from 220 buildings, ranging from radio communication masts on remote hill-top sites to Milton Keynes, one of the UK's largest operational police stations. As Energy Manager, I need to understand how and when energy is consumed in each building as I develop a strategy to help reduce that consumption," said Wickham, Energy Manager, Thames Valley Police.

The Police Go to Trial with IMServ

To explore how it can better control energy expenditure, Thames Valley Police are taking part in an IMServ monitoring trial. IMServ is one of the UK's leading brands in Carbon & Energy Solutions: from complete end-to-end outsourced solutions to individual services and consultancy to meet specific business needs and energy targets.

Invensys Operations Management breadth of expertise and resources through IMServ solutions can help any organization develop an energy plan whether they are just starting out or have implemented some existing energy management plans. IMServ provides support in three key areas: data services, insight consultancy and carbon & energy saving technology.

By utilizing Energy DataVision (EDV), the police force will be able to see unexpected surges in consumption and take appropriate action. Before Energy DataVision, the only indicator of energy waste was a larger than normal energy bill. This reactive approach provided little insight into when and where energy usage surged or how to reduce consumption.

Thames Valley Police, working with IMServ, selected 11 sites, ranging from a 19th century station in Newport Pagnell to the modern unit in Milton Keynes shopping center to be fitted with multi-utility half hourly meters to monitor energy usage. Their readings will be compiled and presented through a secure website based on Energy DataVision (EDV). The trial will last at least a year, to account for seasonal variations, and, if successful, the system will be considered for roll-out across all five of Thames Valley's Basic Command Unit areas: West Berkshire, East Berkshire, Oxfordshire, Buckinghamshire and Milton Keynes.

According to Wickham, *"My main aim is to lower base load consumption. At the moment even a*



Savings are possible in any building regardless of size age or usage.



Using energy intelligence to influence future building design and operation.

small unit, used as a public service office, has a high base load throughout the day and night. Lowering this minimum spend across the board would lead to huge annual savings."

Footing the Bill

If the system goes live across the region, Wickham says Energy DataVision will be an invaluable tool for managers in validating bills and disseminating information. Each Business Manager will be able to access the information they need through a full suite of reports that track energy usage monthly, weekly and daily, delivering relevant intelligence and calling time on lengthy reports.

In order to capitalize on the data provided by Energy DataVision, IMServ solutions will deliver

proactive Energy Management and Carbon Control initiatives including alerts and controls, business process changes, active management of energy through constant monitoring and altering staff behavior.

"If every member of the force took the time to switch off unnecessary lights, heaters and computers we could greatly reduce our annual energy spend. Leaving just one computer on overnight and at weekends can cost up to £25 per year. If you multiply this by the number of computers used, the financial cost could run into thousands of pounds," said Wickham.

Energy Monitoring Facilitates a Greener Future Police Force

The Carbon Trust and AML Consultants are heavily involved in the trial, providing analysis and support; they plan to use the data in a review of building energy consumption and as part of a wider monitoring project.

This, in turn, will have an impact on how police buildings are designed and operated in the future. For instance, Neil plans to use IMServ energy intelligence to ensure new stations being planned are designed to be as energy efficient as possible.

IMServ offers a flexible menu-based approach to Energy Management and Carbon Control: from complete outsourced solutions to individual targeted services.

*This document was realized thanks to the support of:
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