

## Case Study – Times Place – Focus on Sub-metering



### Background:

Times Place is a 60,600 sq. ft. property across eight floors located on Pall Mall. Due to the business nature of one of the tenants, the building needs to be accessed 24/7 and therefore controlling plant running times was proving problematic. A new Building Management System had been installed and yet the £130,000 annual spend on electricity and gas showed no signs of decreasing.

### Service Provided:

The Property Management Company decided to install eco-monitor's Sub-Metering and Voltage & Power Factor Monitoring system. Working closely with the Property Manager and the Building Manager we set about developing a full action plan for energy reduction and control based around our analysis, profiling and insights.

Seven sub-metering points were installed in the property and we used these to work in tandem with the Building Management System to identify the inconsistencies in consumption and rectify any anomalies and issues.

### The Result:

Optimisation of the Building Management System was achieved to ensure that scheduling was consistent and our close monitoring of activity has resulted in a 7% reduction in energy consumption. In this case, this 7% reduction is merely from impacting on the landlord plant consumption (35% of the total building), the next phase is to work with the tenants to reduce their proportion (65%) and thereby increase the overall saving from 7% to a targetted 15% for the total building.

Additionally, PIR (infra-red) sensors were installed in the toilet areas in August and September (highlighted in red in the table below). Our system shows that this resulted in an immediate reduction in consumption (highlighted in green) which can be seen to continue, therefore providing our client with the ability to measure their return on investment.

### Monthly electricity consumption by individual plant

Times Place Monthly comparison	Ventilation plant room, Basement - MCC A (kWh)	Boiler room, Basement - MCC B (kWh)	Staged dry coolers, Roof - MCC E (kWh)	Chiller 1 & 2 (kWh)	Landlords Lighting and Small Power - LL LG L1 (kWh)	Landlords Lighting and Small Power - L2 L3 L4 (kWh)	Landlords Lighting and Small Power - L5 L6 L7 (kWh)
Jun-10	9,392	4,321	5,392	17,296	2,904	2,696	4,894
Jul-10	9,877	4,506	5,914	20,662	3,018	2,697	5,041
Aug-10	10,319	4,664	4,237	14,432	2,692	2,792	5,229
Sep-10	9,482	4,382	3,334	13,324	1,859	2,736	4,799
Oct-10	9,608	4,300	2,189	10,223	1,671	2,149	2,485
Nov-10	9,555	4,488	1,472	6,878	1,609	2,180	2,552
Dec-10	10,838	5,782	1,439	3,070	1,545	2,082	2,351
Jan-11	8,651	4,138	1,229	5,005	1,600	2,161	2,477
Feb-11	7,729	3,579	1,055	5,344	1,424	2,012	2,332

In this case, we have been able to keep tighter controls of plant running times and identify which tenants are the primary cause of high consumption. This has also enabled our client to recover some of these costs from the tenant directly as their 24/7 occupancy was putting a demand on landlord plant, potentially increasing costs for other tenants in the building.