

Real benefits from site optimisation

CASE STUDY



green optimisation

Any organisation operating an industrial or commercial site can now see tangible benefits by fitting energy Monitoring & Targeting systems (M & T). A major restaurant chain recently fitted two neighbouring sites with Green Optimisation M&T Systems in order to enable management to gain total visibility of site energy use.

The Green Optimisation (GO) package of M & T systems and services produces a number of diverse benefits and is now becoming acknowledged as being a key component of an organisations energy and environmental plan.

Garry Broadbent of Green Optimisation commented, "M&T systems require robust reliable hardware and a well designed software platform," continuing, "our GO Energy Remote systems meets these requirements but it is our unique support service that can make real efficiencies for our clients. Our team is geared towards cost effectively working with clients to facilitate real achievable on-going savings, " noting, " experience really does count in this area, our engineers provide practical input into site practice, they identify inefficient equipment and they constantly drive to identify new initiatives with the shortest return on capital."

Energy Monitoring and Targeting (M&T) is rooted in the principle that it is impossible to manage what cannot be measured. M&T techniques provide feedback on operating practices and identify the subsequent results that are yielded by energy management initiatives.

Green Optimisation (GO) M&T draws on the following principles:

Monitoring: data gathering to establish baselines and monitor resulting impacts subsequent to changes.

Targeting: identification of reduction targets based on past data.

Reporting: energy consumption analysis to make informed decisions on the measures required to meet targets.

When presented with this particular twin site restaurant project the Green Optimisation (GO) M&T team followed standard procedures & the GO disciplined two step approach in order to deliver the required results which would meet the clients energy reporting needs and objectives:

1. Site analysis and identification of main consumers
2. Identification of other variables (production, weather, schedule, etc.)

Once these steps are carried out the GO service is activated which turns raw information into cost and carbon savings:

Measure: data gathered automatically at regular intervals from both restaurants.

Define the baseline: design a basic model using all variables which acts as a template for the restaurants standard operations

Monitor variations: create visibility with regard to the difference between energy used/data measured and the baseline objectives, threshold targets and alarms are then activated if these baseline objectives are exceeded.

Identify causes: subsequent to identifying and verifying the variations above the baseline, the GO team identify related causes within the restaurant, whether these are positive (to be repeated and encouraged) or negative (to be eliminated).

Set targets: use the baseline to identify realistic and attainable targets with an option to utilize the GO teams experience on a project or contract basis.

Monitor results: ensure that projected targets are reached and sustainable with regular reporting and feedback in order to enable management reporting and complete visibility in order to attain on-going energy cost reduction savings.

The results from this project enabled the restaurant to receive clear information with an energy dashboard that is site specific.

Monitoring and targeting is not all about the hardware and software, it is about regular attention and focus on site specific requirements.

In this situation the Green Optimisation team are able to utilize years of food service experience in order to add real value to the clients operations.

The systems installed within this national restaurant chains twin site project are geared to provide standard Green Optimisation system benefits:

GO ACHIEVE Significant energy savings (between 5% & 15%)

GO ACHIEVE Short payback periods (less than 2 years)

GO ENABLE Energy cost management & control

GO REDUCE Carbon emissions & meet CO reduction targets

GO DETERMINE Achievable site energy savings

GO MEET 2014/15 ESOS mandatory sub metering - annual energy audits

GO BENCHMARK Profile key sites for programmed optimisation

GO ROLLOUT Plan & implement energy cost saving measures