AUTOMATIC MONITORING AND TARGETING (aM&T)

Background

Automatic monitoring and targeting (aM&T), through robust automatic meter reading (AMR) and effective software, gives organisations visibility of their energy use. Without that visible data - clearly presented and easily accessed – energy reduction strategies can't gain traction.

aM&T helps to identify and quantify signs of avoidable waste or other opportunities to reduce consumption.

For 2013 that should mean cohesive, coherent data collection systems harvesting information from energy influencers like overall staff presence and working hours, as well as others such as production figures and variations in weather.

t-mac action points:

- aM&T is vital to an effective energy management strategy.

- aM&T for 2013 should extend beyond day+1 data into taking real-time data from numerous points, then helping compile that data into logical, persuasive, evidence-based displays which alert on inefficiencies instantaneously.

Lisa Gingell, director of t-mac Technologies Ltd, says:

The right tools make any job so much simpler. Gaining visibility of energy data without those tools isn't easy, as we discussed in a t-mac blog back in March 2013.

aM&T has a huge role to play in generating that visibility, as well as providing measurement and verification (M&V) which allow energy management practices to be easily quantified. Such is its importance that a Carbon Trust report found businesses could shave at least 12 per cent off their energy bills simply by incorporating effective aM&T into their energy management mix.

aM&T provides the raw data for so much of the energy management mix, and its significance should not be underestimated. In the past, metering and targeting technology provided information on activity and energy consumption in specific areas within a building, or for machinery such as boilers and air conditioning systems.

In 2013, next generation aM&T is not just about day+1 data – it's about taking real-time data from numerous points, allowing businesses to pinpoint areas where energy efficiency measures should be implemented, then adding in controls.

Creating reports from aM&T – working with and displaying the data stream in an easily-understood and easily-manipulated way – means moving away from standard reports

focussing on energy profiles, degree days and [cusum](). In the t-mac system, cusum enables users to detect changes in energy consumption patterns, while our degree days function enables users to accurately compare consumption patterns year-on-year. While these are crucial functions of reporting software, aM&T for 2013 is about having systems which offer dynamic reporting and bring information in from OTHER energy influencers like weather, inside and external temperatures, staff numbers and production figures – not just mains and sensor sourcing.

The way staff use buildings (the time they spend in them, what they do while they're there and how they interact with energy-intensive equipment) all affect the amount of energy used by that building. Effective, forward-thinking aM&T must also take account of factors like overall staff presence and working hours, as well as others such as production figures and variations in weather.

Staff buy-in, which is so important in creating sustainable, results-driven energy management strategies (and which we discussed in our [Psychology of Energy Management Green Paper]()) is influenced by feedback, as we know from studies such as those of Clive Seligman and John M Darley and Ontario Hydro. With effective, forward-thinking aM&T, accurate measurement and logical, persuasive, evidence-based displays let staff see where energy is being wasted and why, then take action and focus their efforts to make savings.

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