

# Case Study #22

Voltage Power Optimisation



## Authority uses powerPerfector to set an example

**Why it is interesting:** When Cheshire East committed to a 25% reduction in CO<sub>2</sub>, the council needed to find products and solutions that would not only be effective but be effective quickly. Early investments in powerPerfector's voltage optimisation and several other energy efficiency measures are now paying dividends.

### Cheshire East Council

#### Annual Savings

kWh:	373,231
CO <sub>2</sub> kg:	203,037
£:	32,807
ROI:	26%

\*based on 5 recent installations

Don't take our word for it...

*"From the very first installation of powerPerfector's Voltage Power Optimisation we had confidence in its performance and savings so have progressed with further installations."*

Colin Farrelly, Energy Manager  
Cheshire East Council



#### Further information

For information on this, or any of our case studies, please contact:  
020 7262 6004  
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As the third largest unitary authority in the North West, Cheshire East Council has a responsibility and legal requirement to secure a sustainable future for those who live, work and visit the borough.



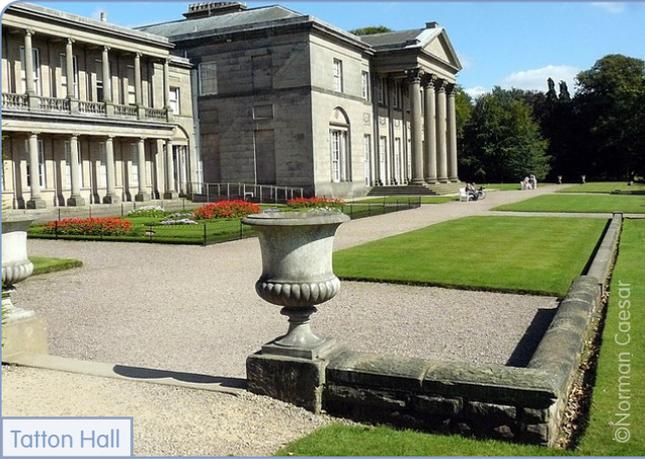
The council started to meet this responsibility at an early stage by signing up to the Nottingham Declaration in 2008/9 and continued with its own Carbon Management Plan. Working with the Carbon Trust, the council is aiming for a 25 per cent reduction in carbon emissions by 2016.

As well as helping to meet the council's carbon target, energy efficiency also helps the council's finances. The cost of wasted energy can be excessive, not achieving this target is estimated at £9.2 million by the Carbon Trust.

Another financial factor recognised by the council is the volatility and upward trend of energy costs. There is a strong incentive to put measures in place which manage the risk of rising energy costs. The challenge comes in finding measures which can have a significant effect.

#### Minimal disruption

With the majority of emissions coming from council buildings, finding products and solutions which can be retrofitted into older stock was another hurdle. Fortunately powerPerfector's solution is ideally suited to retrofits and can be installed with minimal disruption to day to day activities.



Tatton Hall

Several sites were identified as 'quick wins' at an early stage and the results from these installations encouraged the council to continue with the implementation of **powerPerfector** across the estate. Westfields, Municipal Buildings,

Delamere House, Macclesfield Town Hall, Macclesfield Leisure Centre and Wilmslow Leisure Centre since 2009, were followed by a variety of sites bringing the total to eleven by 2013.

Colin Farrelly, Energy Manager, Cheshire East Council said "From the very first installation of **powerPerfector's** Voltage Power Optimisation we had confidence in its performance and savings so have implemented the technology across the wider Council estate."

One of the benefits of voltage optimisation is that each installation affects the entire site's electrical use. This means that, when compared to projects which have a similar pay back period, such as lighting, voltage optimisation can have a much larger effect.

### Approved Installers

Our network of installers have specific experience of installing Voltage Optimisation. Our engineering department has vetted and provides ongoing training to each company and each individual working with **powerPerfector**.

### Specialist Logistics Support

Having the support of two logistics companies means we are able to install into almost any building. External installations, installations on roofs, installations in listed buildings. We have experienced them all.

### Field Engineers

An in house team of qualified electrical engineers oversees each project and acts as quality assurance over our approved installers.

### PRINCE2 Project Managers

All of our Project Managers are certified tested to the higher 'practitioner' standard of PRINCE2.



"The installation went very smoothly. A pre-installation meeting ironed out any logistical problems and the team were very helpful."

Derek Johnson  
Energy Officer  
Cheshire East Council



There are a range of case studies and client testimonials available on our website, please visit [www.powerperfactor.com](http://www.powerperfactor.com) for further information.