



HELPING LOCAL AUTHORITIES SAVE MONEY AND REDUCE CARBON FOOTPRINT. **GUARANTEED.**

With limited budgets and the implementation of the Carbon Reduction Commitment, Local Authorities are turning to reputed solutions such as voltage optimisation, which are not only capable of reducing electricity usage and carbon emissions, but can also significantly reduce operating costs, all with short payback periods.

WHY POWERSTAR FOR LOCAL AUTHORITIES & COUNCILS?

Powerstar's acclaimed engineering approach ensures the technology is proven, reliable and secure, and therefore creates no compromise to a Local Authority's operations.

- **Record savings of 26.1% on energy consumption and associated CO₂ emissions**
- **Average savings of 12-15% on energy consumption**
- **Significant reduction in harmonics**
- **Up to 15 years warranty and a 50 year life span**
- **No moving parts, therefore no maintenance**
- **Increased life expectancy of equipment and reduced maintenance costs**
- **No negative impact on facilities or services**

THE CARBON REDUCTION COMMITMENT ENERGY EFFICIENCY SCHEME

The CRC is a mandatory scheme that is a central part of the UK Government strategy to deliver carbon reduction targets.

- **Local Authorities are among the 5,000 commercial and public sector organisations that are required to participate in the CRC**
- **Local Authorities are under increasing pressure to implement an effective strategy for improving energy efficiency and making carbon savings**
- **It is in the best interest of Local Authorities to lower energy usage and to reduce their carbon emissions in order to limit CRC taxation**
- **Powerstar can help Local Authorities reduce their carbon emission tax by making real savings in both energy consumption and carbon emissions**

CASE STUDIES

TOWER HAMLETS COUNCIL

Tower Hamlets Council is in London's East End, and is one of the five host boroughs for the 2012 London Olympic Games. The Council has a strong environmental strategy and is undertaking a number of initiatives to reduce its energy consumption and lower its carbon emissions. Its vision is to become a council with a progressively lower environmental impact, thus setting an excellent example of leadership in environmental good practice to the community.

Savings

Savings of **12%** in electricity consumption have been achieved through the installation of a **226KvA** Powerstar unit at Albert Jacob House. An annual saving in electricity consumption of **54,065kWh** was achieved following the installation. This equates to a saving of **£6,411** on annual electricity charges. Carbon emissions were also reduced by **30 tonnes per annum**.



CORNWALL COUNTY UNITARY AUTHORITY

Cornwall County Unitary Authority has a number of leisure centre facilities that are significant users of energy. The Council identified three centres – Waterworld, Newquay Sports Centre and Polkyth Leisure Centre – where they wanted to achieve the highest efficiency rating and turned to Powerstar to provide a solution.

Savings

Total electricity consumption was reduced by an average of **12.5%** across the three leisure centres chosen for voltage optimisation. As a direct result of the Powerstar installation the council was able to achieve excellent efficiency ratings.



NORTH EAST LINCOLNSHIRE COUNCIL

North East Lincolnshire Council regards tackling the causes of climate change as serious business – not only does saving energy and carbon have positive effects on the environment, but it also economises the way in which the Council uses the public's money. Furthermore, the Council is in the process of implementing a carbon management plan that will help reduce its carbon footprint and contribute to its efforts of tackling climate change.

Savings

Following an in depth site survey and the installation of Powerstar, the Council is now saving **24.72%** on its annual energy consumption. The Council is saving **57,853kWh** per annum and **£6,094** off its annual electricity bill. This considerable reduction in kWh's is setting North East Lincolnshire Council on a promising path of becoming a more green, eco-friendly Local Authority.



NEWPORT CITY COUNCIL

Newport City Council was eager to dramatically reform its energy consumption by means of reducing its carbon footprint and setting a good example to other councils and businesses alike.

Savings

The Council was promised a 5.4% reduction in its energy consumption but Powerstar outperformed this prediction by 3.4%, providing Newport City Council with an **8.8% energy consumption saving**. The Council is set to save **165,016kWh** per annum, providing an impressive payback period of **2.4 years**. This reduction will serve the Council particularly well in their participation in the CRC scheme.



DERBY CITY COUNCIL

Derby City Council is aiming to reduce its carbon emissions by 25% by 2013/14 as part of its Climate Change Strategy. The challenge to Powerstar was to demonstrate that it is the most efficient and cost effective system capable of delivering the savings expected by the Council.

Savings

Powerstar is saving the Council in the region of **£10k** per annum in electricity costs. The system installed at the Eagle Centre market is saving **128,972kWh** annually, which equates to **14.6%** in electricity consumption. Powerstar is also helping the Council lower its carbon emissions by **69.2 tonnes** per annum.



COPELAND BOROUGH COUNCIL

Copeland Borough Council is extremely passionate about sustainability and encourages individuals and communities to contribute to environmental sustainability. Wanting to implement voltage optimisation as part of its own commitment to the environment, Copeland Borough Council turned to Powerstar.

Savings

Powerstar has reduced the Council's incoming voltage by 7.3% to 225v. The installation of Powerstar at Copeland Borough Council has produced an energy saving of **59,760kWh per annum** and, as a result of this, **32.6 tonnes of carbon dioxide** are saved each year. This annual saving is equivalent to the CO₂ produced by driving 98 thousand miles in a car or heating a home for 5 years.



COTSWOLD DISTRICT COUNCIL

Cotswold District Council is committed to more efficient use of the energy it consumes and to reduce the size of its carbon footprint. The Council has a carbon management plan that aims to cut CO₂ emissions by 25% by 2015.

Savings

Powerstar was commissioned to install a **286KvA** unit at the Leisure Centre, which has enabled the Council to achieve energy consumption savings of **57,614kWh**. This equates to an overall energy saving of **8%**. The Centre has also decreased its carbon footprint by reducing CO₂ emissions by **54 tonnes**. In financial terms Powerstar is projected to achieve an annual saving of **£7,800** on the Leisure Centre's electricity costs.



CARLINGHOW PRINCESS ROYAL PRIMARY SCHOOL

Carlinghow Princess Royal Primary School is aware of its corporate responsibility to reduce carbon emissions and sought a reliable solution that would allow it to reduce its impact on the environment without affecting the high level of facilities available to its pupils.

Savings

The Powerstar system was able to outperform the guaranteed **10.1%** savings predicted, instead achieving an impressive **15.2%**. Based on these savings, Carlinghow Princess Royal Primary School has saved **4,434kWh** in just two months.



POWERSTAR: OFFERING THE ENGINEERING SOLUTION FOR LOCAL AUTHORITIES

Powerstar has an in-depth knowledge of and a wealth of experience in delivering voltage optimisation systems for Local Authorities and Central Government. The success achieved by Powerstar has established it as a reputable, proven and secure energy saving solution.

DEDICATED LOCAL AUTHORITIES CONSULTANT

Powerstar has a dedicated Local Authorities consultant who leads on all central and local government applications. This specialist approach ensures that a streamlined customer-centric package is delivered and that a bespoke energy saving solution is created that caters specifically to the unique and challenging needs of Local Authorities.

CPD CERTIFIED PRESENTATIONS

Our Local Authorities consultant is on hand to deliver our acclaimed voltage optimisation CPD training sessions. This provides a fantastic opportunity for site staff to learn more about voltage optimisation and the technology behind it. It also presents Local Authorities with an ideal opportunity to investigate whether voltage optimisation can meet their needs.

HERE'S WHAT OUR CLIENTS SAY:

“ We are committed to reducing our energy consumption and CO₂ emissions throughout the district. This decision highlights our dedication to reducing our own carbon footprint. The projected savings that Powerstar is set to deliver will be a welcome boost towards helping us achieve our energy efficiency targets. It was also ideal to be able to purchase from a local company. ”

Councillor Dennis Kelly
Cabinet Member for the Environment, Bolsover District Council

“ The introduction of the Powerstar unit at the Leisure Centre building is a significant contributor to Cotswold District Council's energy saving programme. I am particularly pleased that we have reduced costs while contributing to our goal of achieving a 25% reduction in harmful carbon emissions by 2015. ”

Councillor Mark Tufnell,
Cabinet Member for Environment and Communities, Cotswold District Council



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