



powerstar[®]

CASE STUDIES

GLOBAL LEADER IN VOLTAGE OPTIMISATION

www.powerstar.com



SHOWCASING A SELECTION OF POWERSTAR SAVINGS RESULTS FROM A VARIETY OF INDUSTRIES



- 🌿 Average electricity consumption savings of 12%
- 🌿 100% savings guarantee
- 🌿 Up to 15 years warranty
- 🌿 Thousands of installations, across a broad range of industries
- 🌿 Flexible finance and leasing packages available
- 🌿 Typical payback periods of 2-3 years





THE CLIENT

UK INSTALLATION

ASDA is one of the biggest supermarket retailers in the UK. Owned by US retail giant Wal-Mart, ASDA has a range of superstores and supermarkets in its portfolio.

OUTCOME

- Powerstar have **worked in partnership with ASDA since 2009**, we continue to provide ASDA with pioneering, market leading technologies
- Average savings achieved of **£10,600 per store**
- Payback periods average at **2.6 years per store**



THE CLIENT

AFRICAN INSTALLATION

Investec is a specialist Bank and Asset Management company providing a diverse range of financial products and services to South Africa, UK and Australia.

OUTCOME

- Annual consumption savings of **11.3%**
- Reduced CO₂ emissions by **258.8 tonnes**
- System installed **without disrupting** the normal day to day running of the company



THE CLIENT

ASIA PACIFIC INSTALLATION

Swire Cold Storage are a leading Australian provider of cold-chain logistics services and supply chain solutions.

OUTCOME

- Powerstar is delivering electricity consumption savings of **13%-14%**
- The installation has resulted in a reduction in CO₂ emissions of **490 tonnes**
- The project was completed with **no disruption** to the delicate cold storage operation



THE CLIENT

MIDDLE EAST INSTALLATION

Ski Dubai is an indoor ski resort with 22,500 square metres of indoor ski area and a 85 metres high indoor mountain with 5 ski slopes.

OUTCOME

- Delivered annual electricity consumption savings of **9.7%**
- Reduced CO₂ emissions by **79 tonnes** per annum
- Savings achieved without compromising the site's challenging operations



THE CLIENT

EUROPEAN INSTALLATION

Atlas Insurance is part of the Atlas Group, and is one of the leading insurers in Malta.

OUTCOME

- Achieved electricity consumption savings of **13.4%**
- Payback period of **3.9 years**
- Atlas Insurance have achieved a **27%** return on investment



THE CLIENT

UK INSTALLATION

RWE npower are a leading integrated UK energy company and supplier of gas, electricity & related services to homes and businesses.

OUTCOME

- Powerstar proved performance & savings capability through independent tests
- Systems are now installed into the RWE npower office portfolio
- Powerstar signed an exclusive partnership with npower Business to **provide Powerstar systems to npower business customers**



pwc

THE CLIENT

EUROPEAN INSTALLATION

PricewaterhouseCoopers (PwC) is a multinational professional services network, offering assurance, advisory and tax service lines.

OUTCOME

- Powerstar achieved **8.1%** savings in electricity consumption
- CO₂ emissions reduced by **66.4 tonnes** per year
- Improved efficiencies of office equipment & lighting



THE ICE CO[®]
logistics

THE CLIENT

UK INSTALLATION

The Ice Co Storage & Logistics are the logistics division of Europe's largest ice manufacturer, arranging storage and transportation of products.

OUTCOME

- Successful in head to head trials against competitor systems
- Annual electricity consumption savings of **14.74%**
- Savings on electricity bills of **£7,124** per year



The co-operative
food

THE CLIENT

UK INSTALLATION

Co-operative Food is a food-retailer with a portfolio of 2,800 local convenience and medium-sized food retail stores.

OUTCOME

- Savings in electricity consumption average **12%-14%** per store
- Annual savings on electricity bills average **£9,000-£11,000** per store
- Contributed to reduction of CO₂ emissions by **35%** across all stores



W
WOOLWORTHS

THE CLIENT

AFRICAN INSTALLATION

Woolworths is one of the largest retail chains in South Africa selling home wares, food, clothing and beauty products. They have installed Powerstar voltage optimisation into 4 stores.

OUTCOME

- Average of **8%** on electricity consumption
- Average CO₂ reduction of **153.56 tonnes**
- Helped Woolworths achieve **energy reduction targets** of 40%



Carrefour

THE CLIENT

EUROPEAN INSTALLATION

Carrefour is one of the largest supermarket retail chains in the world with a varying range of sites, most being convenience stores.

OUTCOME

- A reduction in annual electricity consumption of **10.4%**
- Powerstar achieved a **240 tonnes** reduction in CO₂ emissions
- Payback period of less than **1 year**



Swann-Morton

THE CLIENT

UK INSTALLATION

Swann Morton is a world leader in the manufacture of surgical scalpel blades, handles and disposable scalpels.

OUTCOME

- Powerstar delivered annual electricity consumption savings of **9.9%**
- CO₂ emissions have been reduced by **102.5 tonnes** per annum
- Electricity savings of **£11,559** per year



UK INSTALLATION

THE CLIENT

Premier Inn is the UK's largest hotel brand and is part of the Whitbread PLC portfolio. There are more than 700 Premier Inn hotels in the UK.

OUTCOME

- More than **400** Powerstar installations in the Whitbread estate
- Average electricity consumption savings across all sites of **12.35%**
- A **12,062 tonne** reduction in annual CO₂ emissions



ASIA PACIFIC INSTALLATION

THE CLIENT

Palais Hotel in Adelaide, Australia, is a newly renovated popular, beach-front hotel.

OUTCOME

- Powerstar achieved **10.5%** savings in electricity consumption
- Annual electricity savings of **£7,370**
- Return on investment period of **under 3 years**



AFRICAN INSTALLATION

THE CLIENT

The Manhattan Hotel in Pretoria, South Africa is an upscale New York-themed hotel and the only 3 star hotel in Pretoria with a spa.

OUTCOME

- Annual consumption savings of **20.71%**
- **30% less** downtime due to improved power quality
- Incoming voltage reduction of **8%**



MIDDLE EAST INSTALLATION

THE CLIENT

The Emirates Towers are one of the most stunning architectural highlights on the Dubai skyline. The Jumeirah Emirates hotel tower has 400 spacious, newly furnished rooms and suites, paired with state-of-the-art meeting and business facilities.

OUTCOME

- Powerstar achieved **9.16%** savings in electricity consumption
- Improved equipment efficiency
- Helped the site achieve its carbon emissions target



EUROPEAN INSTALLATION

THE CLIENT

Coral Beach Hotel & Resort is a member of the Leptos Calypso hotel group. This unique, 5-star resort has all-inclusive facilities.

OUTCOME

- Annual electricity consumption savings of **16%**
- A **6%** reduction in maximum demand (kVA) for the resort
- Helped the resort achieve Corporate Social Responsibility (CSR) targets with no negative affect to guest services



UK INSTALLATION

THE CLIENT

Principal Hayley is a hotel and conference venue operator with hotels in the UK, France and Spain. The Palace Hotel in Manchester is amongst the flagship sites in the hotel portfolio.

OUTCOME

- Savings on electricity consumption of **18%** per year
- Annual electricity bill savings of **£30,126**
- Payback period under **1.4 years**





UK INSTALLATION

THE CLIENT

2 Sisters Food Group produces branded and retailer own brand ready meals, sandwiches, pizzas, biscuits and puddings. Powerstar was installed at Northern Foods, which is now part of the 2 Sisters Group.

OUTCOME

- Three units installed
- Saving of **8.20%**, **9.84%** and **9.70%** respectively on annual electricity consumption
- Annual electricity savings of **£61,856**



UK INSTALLATION

THE CLIENT

Trelleborg is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments.

OUTCOME

- Annual savings in electricity consumption of **11.2%**
- Reduction in electricity bills of **£17,682** per year
- Prolonged lifespan of on-site equipment and reduced maintenance costs



MIDDLE EAST INSTALLATION

THE CLIENT

TenCate is market leader in synthetic fibres and components, supplying sports surfaces for a range of sports such as soccer, American football, hockey, tennis and golf.

OUTCOME

- Savings of **8.7%** on annual electricity consumption
- Reduction in CO₂ emissions of **462.5 tonnes** per year
- Installation was completed with no adverse affects to the business operations.



EUROPEAN INSTALLATION

THE CLIENT

Photos Photiades Brewery Ltd is a producer and distributor for Carlsberg in Europe.

OUTCOME

- Reduced electricity consumption by **17%** per year
- CO₂ emissions cut by **21 tonnes** per annum
- Return on investment of just **1 year**



UK INSTALLATION

THE CLIENT

Olam International is a leading agri-business operating from seed to shelf in 65 countries, supplying food and industrial raw materials to over 13,600 customers worldwide.

OUTCOME

- Reduction in annual electricity consumption of **14.1%**
- Powerstar achieved cuts in CO₂ emissions of **203.1 tonnes** per annum
- Reduced wear and tear on machinery and equipment



UK INSTALLATION

THE CLIENT

Newburgh Precision is part of Newburgh Engineering and are one of the premiere contract manufacturing companies in the UK, encompassing design, machining, fabrication, iron founding, welding and assembly.

OUTCOME

- Savings of **10%** on annual electricity consumption
- Annual electricity bill savings of **£14,079**
- Payback period of **3.2 years**



THE CLIENT

UK INSTALLATION

Ashworth Hospital is a high-security psychiatric hospital in the UK, it is managed by the NHS.

OUTCOME

- Powerstar achieved annual electricity consumption savings of **12%**
- Payback period of under **3 years**
- **No compromise** to the high-tech security system in place at the hospital



THE CLIENT

UK INSTALLATION

The Department of Business Innovation & Skills (BIS) is a ministerial department of the UK Government, responsible for economic growth through investment in skills and education.

OUTCOME

- Annual electricity consumption savings of **12.8%**
- Powerstar generated financial savings of **£6,159** per year
- **29 tonnes** of CO₂ emissions reduced per annum



THE CLIENT

UK INSTALLATION

London City Hall is home to the Mayor of London, the London Assembly and 600 permanent staff who work for the Greater London Authority (GLA).

OUTCOME

- Savings in electricity consumption of **13.6%** per year
- Payback period of under **2 years**
- Significant reductions in carbon emissions and electricity costs



THE CLIENT

UK INSTALLATION

West Middlesex University Hospital is an acute NHS hospital in London. The hospital offers all services including A&E, acute medicine, surgery and maternity services.

OUTCOME

- Powerstar delivered annual electricity consumption savings of **8.4%**
- Carbon emissions reduced by **163.6 tonnes** per year
- Return on investment of under **2 years**



THE CLIENT

UK INSTALLATION

Royal Hallamshire Hospital is a general hospital in the UK, managed by the NHS. The hospital includes 12 operating theatres and most non-emergency departments.

OUTCOME

- Powerstar achieved savings of **5.1%** on annual electricity consumption
- A **11.5%** reduction in kVA demand was achieved
- The installation has caused no disruption to the patient care services and critical operations of the hospital



THE CLIENT

UK INSTALLATION

Tower Hamlets London Borough Council is a local authority for a borough in central London. Powerstar was installed into a homeless services facility within the borough.

OUTCOME

- Savings in electricity consumption of **12%** per year
- Electricity bill savings of **£6,411** per annum
- Annual CO₂ emissions reduced by **30 tonnes**



Sheffield Hallam University

UK INSTALLATION

THE CLIENT

Sheffield Hallam University is the 4th largest university in the UK, with more than 33,000 students and 4,500 staff. The University is based on 2 city centre campus sites.

OUTCOME

- Annual reduction in electricity consumption of **16%**
- Reduction in maximum demand of **19%**
- Benefited from a **75% reduction** in failure of lighting tubes



THE UNIVERSITY OF MELBOURNE

ASIA PACIFIC INSTALLATION

THE CLIENT

The University of Melbourne has over 42,000 students and around 3,500 staff. Powerstar was installed in the university's Law building.

OUTCOME

- Electricity consumption reduced by **12.75%** per year
- The university's CO₂ emissions cut by **268 tonnes** per annum
- Powerstar demonstrated in controlled tests at the university that **savings could be made on LED lights**



Ευρωπαϊκό Πανεπιστήμιο Κύπρου
European University Cyprus

EUROPEAN INSTALLATION

THE CLIENT

The European University is a for-profit educational institution with 5,000 students. It provides undergraduate, graduate and doctorate degrees.

OUTCOME

- Installed on two sites, reducing electricity consumption by **11.9%** and **8.8%**
- CO₂ emissions reduced by **57 tonnes** per year
- Both systems delivered payback periods under **3.5 years**



ST HILD'S

UK INSTALLATION

THE CLIENT

St Hild's School is a secondary school in the UK, for children aged 11-16. With over 700 students the school provides all core educational facilities for pupils.

OUTCOME

- Powerstar reduced electricity consumption by **9.2%**
- Annual financial savings of **£4,795** were achieved
- CO₂ emissions reduced annually by **27.1 tonnes**



Portland College

UK INSTALLATION

THE CLIENT

Portland College is an educational establishment providing education for around 270 disabled students aged between 16 and 60.

OUTCOME

- Powerstar reduced annual electricity consumption by **11.3%**
- Financial savings of **£12,591** per year
- The installation reduced CO₂ emissions by **85.5 tonnes** per annum



UNIVERSITY OF SURREY

UK INSTALLATION

THE CLIENT

The University of Surrey specialises in science, engineering, medicine and business. The campus hosts 13,895 students and 2,300 staff.

OUTCOME

- Annual reduction in electricity consumption of **8.1%**
- Financial savings of **£13,911** per year
- Return on investment of **3 years**



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