

## Manchester United limited CRC Energy Efficiency case study



## Our Energy & Carbon Reduction Challenge

Manchester United is much more than a football club, the Old Trafford stadium is one of the largest stadiums in Europe with a seating capacity of almost 77,000. Multiple conference centres, function rooms, a dedicated museum, a television broadcasting centre, educational facilities and a major retail unit are also located on site. Old Trafford has the capacity to produce 8,000 full meals a day in a series of high-tech industrial kitchens.

Manchester United had been reducing its energy consumption long before the government introduced the Carbon Reduction Commitment Energy Reduction Scheme (CRC); a 10% carbon reduction commitment was made in October 2008. Through the introduction of carefully managed incentives and a focus in turning all operations 'green', a cost saving of £235,000 was made in just seven months in the 2008/2009 financial year.





Manchester United is thrilled to have topped the CRC performance league table with a number one position and a 100% score; this was achieved through hard work and energy saving commitments over several years.

Manchester United was the 250<sup>th</sup> organisation to achieve the Carbon Trust Standard which demonstrated the positive commitment to continue to become an environmentally responsible club and company. The Carbon Trust Standard has become one of the most recognised and prestigious environmental and carbon accreditation schemes in the UK, only rewarding organisations that achieve target reductions by taking responsibility of their own emissions. It requires year on year carbon savings together with an assessable carbon reduction strategy. The Carbon Trust Standard auditor stated that: "the Manchester United Carbon Trust Standard Portfolio was the best [he had] received from any client" and a "model carbon reduction strategy".

Manchester United appointed 23 individual 'energy champions' across the club which ensure that responsibility is taken for energy consumption. It has been important to look at each individual operation and the staff that are involved ensuring effective reductions are made through mentoring and monitoring. Several key energy saving programs were introduced such as the 'Board Room to Boot Room' Energy Reduction Engagement and Staff Awareness Programme and the 'United to Save Energy - You Can Make a Difference' programme which was launched by Sir Alex Ferguson. These initiatives have not only made a huge difference at Manchester United, but have been recognised as best practise programmes and are in operation across many other organisations.



Managing energy is only half of any energy saving programme - having the right equipment and technology can be as equally important. Manchester United introduced an action plan of energy reduction projects covering: lighting and automation plant replacement and improved controls systems, the rationalisation and upgrade of building management system controls to optimise the performance of heating, intelligent ventilation and air condition systems, energy metering and performance reporting for all sites and rationalisation of out of hours energy use and automated close down procedures.

Through efficient energy management and the phased installation of energy reduction projects, Manchester United has achieved many considerable feats including a reduction of 3,300 tonnes of CO2 since 2008 which is the equivalent saving of the emissions produced by 660 homes in a year and an energy saving of 320,000 kWh per year from a direct lighting 'switch off' programme which is equivalent to the energy used to illuminate a large supermarket for a year.

The success of Manchester United's programme has resulted in the participation of good practice case studies and presentations with the Carbon Trust, Environment Agency and other environmental network groups and hopes to continue to lead the way in energy reduction.

Manchester United is currently in the process of reviewing the latest technology in renewable energy and hopes to make further ambitious energy savings in the near future.