

Newport's 'green' greens

Why it is interesting: Few sporting events capture the imagination in the same way as the Ryder Cup – steeped in history and loved by golfers on both sides of the Atlantic. With a television audience of 750 million, it is the third largest event after the Olympics and the World Cup. For those hosting the event, the eyes of the world are certainly looking in. As such, the demands on the site and its environmental footprint are staggering. So how did the resort manage to hold the greenest Ryder Cup ever?

Celtic Manor Resort

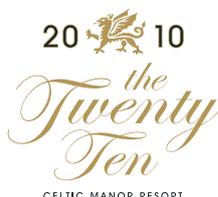
Annual Savings

kWh:	72,467
CO ₂ kg:	36,492
£:	8,902
Av % saving:	10%

Don't take our word for it...

"As well as reducing our costs significantly, the unit has also contributed to Celtic Manor's ongoing drive to save energy and minimise our impact on the environment. We have enjoyed an efficient and professional service in all our dealings with powerPerfector."

Matthew Barnby
Golf Operations Manager



Further information

For information on this, or any of our case studies, please contact:

020 7262 6004
enquiries@
powerperfector.com

The entertainment and hospitality industries have an environmental challenge.

Hosting events, let alone large events such as the Ryder cup requires accommodation, catering, broadcast and transport among other things.

The energy requirements can be daunting and in some cases outstrip the venue's supply.

The emissions from these events and venues can also be troublesome. Modern requirements mean more power than ever is used by guests, delegates and attendees. Periodic events can spike emissions massively leading organisations to CRC obligations and charges.

'The Celtic Manor Resort recognises it has moral and social responsibilities to the environment and is committed to developing an environmentally responsible business.'

Celtic Manor Resort

For both these reasons it makes sense to minimise the amount of energy used by these events. The difficulty is how to achieve this while still having the functionality of modern and in the Celtic Manor's case world leading entertainment?

In a concerted effort to reduce carbon emissions and with the support of the Ryder Cup and local authorities, Celtic Manor brought sustainability into the heart of the event and chose VPO® as part of that drive.

powerPerfector's voltage power optimisation was able to save 10 per cent of the electricity used at the 2010 clubhouse. Optimising the voltage meant that the electrical equipment onsite used less electricity without affecting the site's operations. This meant that when the resort hosted the Ryder Cup, it was able to stay within





its electrical supply and that it reduced the cost and emissions of the event.

Celtic Manor Resort already had a detailed environmental management programme. The programme guided the resort into fitting 10,000 low energy light bulbs and motion sensors, procuring 100 per cent green energy and a variety of other measures. Voltage Optimisation was an important part of minimising energy use. It also meant that the golf resort is not only able to drive energy savings for the large events but throughout the year too.

Prior to the event, Edward Kitson, Ryder Cup Match Director, said, *"We are very impressed so far by the willingness of prospective contractors and suppliers to help make this happen, and we believe we will have some highly innovative and ground-breaking examples of sustainability to present in October 2010."*

Sustainability was included in all aspects of the planning and delivery of the event from the selection of suppliers, to the provision of spectator travel options and offsets, through to the disposal of waste. The approach demonstrates what can

be achieved when sustainability management is included from the start rather than treated as a peripheral activity.

As the Twenty Ten Clubhouse was built for the 2010 event, the resort was able to specify energy efficient equipment from the start. The forward thinking decisions made when designing and building the venue means it is better placed for future events and it will be less affected by energy price rises in the future.

It is easy for organisations to land in a proverbial bunker after a green drive. Not all products and solutions achieve what they promise but the resort found **powerPerfactor's** Voltage Optimisation solution exactly as promised.

A 210kVA **powerPerfactor** unit was specified and subsequently installed in the Clubhouse of the Celtic Manor Resort on 23 November 2009 with an 8% optimisation setting. Following an indepth analysis of the site's equipment a ten per cent saving level was predicted. Three months following installation, further analysis showed the unit had met the predicted savings level.

Other measures implemented

- Use of biodegradable packaging; use of a recycled and re-usable 'eco-cup' in public catering which reduced overall number of vessels by around 60,000 units
- Installation of 10,000 low energy light fittings and motion sensors at Celtic Manor Resort
- Installation of new pollution control measures at golf course maintenance area
- Separation of waste to achieve an 87% re-use and re-cycling rate
- Irrigation of golf courses by stored and recycled rainwater
- Use of recycled vegetable oil to power the tented village
- Switch to a 100% green energy tariff for the venue

There are a range of case studies and client testimonials available on our website, please visit www.powerperfactor.com for further information.