A Review of
The 2010 Ryder Cup Green Drive

The Ryder Cup engages, inspires and entertains millions, presenting an unparalleled opportunity to showcase leadership in sustainability.

This review summarizes The 2010 Ryder Cup Green Drive, key lessons learned and outcomes achieved.
THE GOLF ENVIRONMENT ORGANIZATION is an international non-profit dedicated to helping the global golf industry establish leadership in environmental enhancement and corporate responsibility. Find out more at www.golfenvironment.org
Foreword

THE EMPHASIS on environmental sustainability has been part of a continuum of effort by Ryder Cup Europe since we held the event at Valderrama in 1997.

The 2010 event brought us to Wales, where the Welsh Assembly Government had established a number of world leading sustainable development policies. We wanted to proactively meet, and where possible exceed those government and public expectations.

This led us to expand the scope and depth of our efforts, seeking to integrate sustainability criteria into all aspects of event staging.

We acknowledge the work of the Golf Environment Organization, who have helped us navigate and deliver against a complex range of issues. In addition we thank the many partners who contributed - not only to the tremendous success of The 2010 Ryder Cup, but to a significant reduction in its environmental footprint - enabling The Ryder Cup to take a position of environmental leadership in sport.

While we continue to deliver aspects of social, economic and environmental legacy in Wales, we also look forward to working with new partners for an even more sustainable event at Gleneagles in Scotland in 2014, and to working with the host nation for 2018, who will themselves have presented against environmental criteria during their candidacy and selection.

Richard Hills
Director, Ryder Cup Europe

LIKE MANY of our international partners in golf, The PGA of America recognises both the responsibilities and opportunities that are inherent in environmental stewardship.

The 2010 Ryder Cup Green Drive demonstrated how those running large sporting events can deliver against priority issues - such as the efficient use of fuel and energy, and waste reduction - in a very practical and productive way.

To Ryder Cup Europe’s credit, these goals were integrated seamlessly into the considerable logistical challenges of event delivery.
The outcome was a wonderful sporting occasion that generated a diverse range of tangible environmental gains, which benefit all those associated with the Ryder Cup brand.

Our congratulations to all the parties that contributed to this important initiative, and our gratitude to Ryder Cup Europe for the way experiences have been shared.

We look forward to embracing the challenges and rewards that lie ahead as we too seek to reduce the environmental footprint, and simultaneously raise the environmental advocacy potential, of the US based Ryder Cup matches.

Joe Steranka
Chief Executive, PGA of America
Introduction

COMMENCING IN EARLY 2008
Ryder Cup Europe (RCE) and the Golf Environment Organization (GEO) partnered to integrate resource efficiency, environmental protection and advocacy into the planning and delivery of The 2010 Ryder Cup.

Green Drive Working Group

- Ryder Cup Europe
- Golf Environment Organization
- Ryder Cup Wales
- Celtic Manor Resort
- Welsh Assembly Government
- Newport City Council
- Wales Event Recycling Project
- Greenstone Carbon Management
- VisitWales

A key focus was to proactively deliver the event in line with “One Wales - One Planet”, the Welsh Assembly Government’s world leading sustainable development scheme. This government policy context was the foundation for the initiative, and enabled all parties to commit to the delivery of a world class sporting event with the smallest possible environmental footprint and the highest possible communication and advocacy value.

This report provides an overview of the purpose, scope, activities and achievements of the Green Drive, and should be read in conjunction with “The 2010 Ryder Cup Carbon Footprint Report”, as prepared by Greenstone Carbon Management and published in March 2011.

The 2010 Ryder Cup
Green Drive was a collaborative effort, led by Ryder Cup Europe and GEO, drawing support from local to international stakeholders.
Aims & Objectives

**A world class event with the lightest possible footprint**
- Reduce the carbon footprint of the event by 15-25%
- Zero waste target and reduce deliveries to the site
- Ecological protection and enhancement of Usk Valley
- Transition to cleaner and renewable energy supplies

**Showcase sustainability to event patrons & the local community**
- Increase spectator awareness and involvement in solutions
- Incentivise use of shared, public transport
- Raise awareness of sustainability actions among local people

**Encourage a legacy of environmental action in golf**
- Raise sustainability standards in golf event staging
- Promote sustainability to local and international industry audiences
- Development of sustainable golf event staging toolkit

**Advance the global sport & environment movement**
- Learn from the successes and challenges of other major sporting events
- Share Green Drive outcomes with the international sport environment community
The 2010 Green Drive

PLANNING supported by good communications is critical to achieving a greener event. The effective engagement of a wide range of partners and contributors requires tight core planning, and the establishment of clear scope and targets. To enable diverse stakeholders to recognise the primary focus of their contributions, the Green Drive was structured around four core components of the event:

- **Venue**: Ongoing sustainability actions at The Celtic Manor Resort
- **Staging**: Short term event overlay, infrastructure, materials, products and services
- **Comms**: Harnessing media and spectator interest to raise sustainability awareness
- **Legacy**: Initiating local, national and international sustainability action

TOP LEVEL BUY-IN from the host venue, host government and event administrators provided the mandate for RC2010 partners to innovate around a greener event.

GEO coordinated the Green Drive Steering Group, to ensure the scope of the sustainability plan was comprehensive, whilst remaining practical and relevant to stakeholders.

PICTURED L TO R: Sir Terry Mathews, Celtic Manor Resort; The Rt. Hon. Rhodri Morgan, former First Minister of Wales; George O’Grady, CEO, European Tour; Richard Hills, Director, Ryder Cup Europe; Sandy Jones, Chief Executive, PGA of GB&I
THE FOUNDATION for a sustainable tournament is the event venue. The Green Drive supported Celtic Manor Resort in their progress to level 4 of the Green Dragon Environmental Awards; inspired the resort’s enrolment in GEO’s OnCourse™ programme; and led to an overall expansion in the breadth and depth of the site’s environmental management programme.

- Level 4 Recognition in the Green Dragon Awards, the Welsh Environmental Management System
- New maintenance facility constructed, complete with state of art pollution prevention and closed loop water recycling unit
- Grid power supply transitioned to renewable tariff; electricity entirely generated by wind, wave and solar
Participation in GEO OnCourse™ environmental certification programme

- Extensive ecological, landscape and cultural heritage surveys were undertaken while the site was being prepared for the event. Archeological surveys in particular brought considerable ‘new knowledge’ on The Romans in Great Britain
- An extensive dormouse relocation and monitoring programme has been implemented

- All irrigation water is derived from recycled surface runoff and attenuation in flood plain ponds and wetlands
- 13% reduction in TwentyTen Clubhouse energy use one year after installation of voltage optimizer
- Detailed woodland management plan developed for the CMR Estate, underpinned by policies on native species, structural diversity and ecological richness
- Ongoing consultation for protection and enhancement of River Usk corridor, with practical measures have adopted to reduce disturbance and minimize all pollution risk from golf course maintenance activities
- CMR attained sector leading rates of recycling for glass, aluminium, plastic, paper and cardboard, food waste, green waste and other materials

- 150 tonnes of food waste composted between March ‘09 and October ‘10
- CMR carry out regular water quality analysis, which enables monitoring of the health of the aquatic environment
- 20 hectares of rough grassland and scrub habitat established across the floodplain of the Usk Valley, in conjunction with TwentyTen Course remodelling

- 6000 low energy and LED light fitments installed across Celtic Manor Resort in three years leading to The 2010 Ryder Cup
IN A CONCERTED EFFORT to reduce the environmental footprint of the event, Ryder Cup Europe brought sustainability into the heart of product and service procurement. All contractors were asked about their own sustainability policies and track records, and an emphasis was placed on sourcing locally, ethically and on the basis of life cycle analysis.

Local, organic and Fairtrade food and produce was incorporated into the Taste of Wales menu, and a 87% recycling rate was achieved through well planned front and back of house waste separation and sorting.

As the tented village was constructed, and contractors and suppliers started to bring products and services from across Wales, the UK and beyond, innovative measures were implemented across energy, transport, catering and waste, bringing resource efficiencies and cleaner fuels to the fore.

The tented village was powered by generators that used recycled vegetable oil, all paper was Forest Stewardship Council certified and a number of merchandise and official publications and packages utilized recycled and recyclable cardboard.

All of these efforts have been quantified by Greenstone Carbon Management, who’s official carbon footprint report was also published in March 2011.

- Fuel supply for entire site supplemented with 20% recycled vegetable oil - powering the generators in the main tented village
- Fish and shellfish products were sourced from the region, including hand dived scallops, line caught sea bass and locally farmed mussels

Environmental targets were embraced by contractors, suppliers and licensee holders - broadening delivery and finding innovative ways to lighten the staging footprint
87% of wood, metal, glass, paper, cardboard, plastic, cabling, fabrics, food waste, packaging and other staging materials re-used or recycled

- All on site power generators were specially calibrated, using new technology distributors to ensure consistent and most efficient provision of voltage
- BMW ‘Efficient Dynamics’ courtesy cars were best in class for emissions and fuel efficiency
- Rationalised and shared catering logistics, utilizing a central storage hub at Castle Howard, reduced catering related deliveries to site by 66%
- Bread and other bakery products came from Jones’ Organic Bakery in Bridgend
- In line with Wales’ status as a FairTrade Nation, the caterers ensured all available Fairtrade products were integrated into the supply lines - circa 12 product types
- All contractors obliged to record and provide data for the Carbon Footprint Report

33% estimated reduction in traditional plastic pint glasses, circa 60,000 units. The Ryder Cup souvenir Eco-Cup was a recycled and recyclable plastic pint glass purchased via a deposit scheme. Event patrons were encouraged to re-use on site and take home

- All lamb sourced from the Cambrian Mountains Initiative - a cooperative of farmers dedicated to conservation of the local environment, the highest levels of animal husbandry and eco-tourism
- All honey was sourced locally from a family run, organic honey producer, with revenues being invested back into research into the decline of the honey bee
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- Siting of tented village, grandstands, catering points and general infrastructure was carefully planned to avoid most sensitive areas of the site
- Dair products were provided by Rachel’s Organics, through their Welsh Manufacturing and Distribution Centre
The siting of the tented village, grandstands, catering points and general infrastructure was carefully planned to avoid most sensitive areas of the site.

The caterers used starch-based biodegradable packaging, crockery and cutlery across all public catering areas, and adopted a ‘no polystyrene’ policy.

100% Forest Stewardship Council (FSC) Certified paper products

- Provision of additional ‘Ryder Cup Trains’ from London to Newport
- Carbon offset mechanism established and promoted to all parties including ticket holders, contractors and suppliers
- PGA of America and Ryder Cup Europe offset the flights of teams and entourage using Gold Standard carbon offset mechanism
The tented village was powered by generators that used recycled vegetable oil, a first for a golf event of Ryder Cup scale and profile.
THE 2010 RYDER CUP sought to raise widespread awareness about sustainability issues as they relate to golf and sporting events, and actively engage spectators in reducing the footprint of the event.

A number of traditional and innovative communications measures were adopted, that ranged from the incorporation of environmental messaging into the events core branding, through official programme and spectator guides, to ticket holder enewsletters and via on site signage.

A number of environmental vignettes were also produced, that were played during the week of the event across the Tournament Television - into all hospitality units and across the tented village big screen.

- Environment section on rydercup.com
- Prominent ‘recycling point’ signage was positioned throughout the tented village and car parks
- Official Radio packaging and ticket wallets produced from recycled materials; carried recycling messages
- The official programme and spectator guide both carried in depth features on the Green Drive

Green Drive vignettes produced - broadcast on Ryder Cup Tournament TV, international feed, official and partner websites, and European Tour Weekly
The Environment Minister of the Welsh Assembly Government attended the official ‘Green Drive Reception’, which facilitated information sharing and momentum building amongst partners.

On site, Fairtrade, recycling and FSC logos were prominent on products and packaging.

Spectator Carbon Offset mechanism promoted to all ticket holders with car sharing and public transport options.

Feature article in National Geographic and Green Drive coverage in domestic and international media.

VisitWales integrated environmental messaging into the core look and feel of the event, particularly prominent on the advertising within the park and ride bus fleet.

Articles and news in various Welsh media outlets, including TV, newspapers and websites.

Regular press releases announcing landmarks and milestones.
As a pioneering environmental programme for a golf event, The Green Drive produced a great deal of new knowledge and insight. All parties wanted to ensure that lessons learned, and the momentum and inspiration produced by a greener Ryder Cup would act as a catalyst for environmental stewardship and corporate responsibility in world golf. Equally, partners wanted to find ways in which practical outcomes arising from the initiative would support more sustainable lifestyles and livelihoods in society and business in Wales.

Legacy

Ensuring the multiplier effect of Ryder Cup achievements across Wales and internationally
Of particular importance in this regard was the desire to demonstrate how good government policy (One Wales - One Planet Sustainable Development Scheme) could be integrated into a wide variety of event logistics, business investment and public relations activities. The multi-faceted nature of this sporting event provided a vehicle to showcase a number of diverse issues and actions - in front of the people of Wales and in front of golf sector stakeholders.

- The Green Drive Report and Carbon Footprint will be promoted across international golfing and sporting event partners, by GEO, Ryder Cup Europe, The PGA European Tour and The PGA of America
- Interfacing regularly with local to international partners, including meetings and presentations at UNEP Sport and Environment Forum; the SportAccord Convention; London and Vancouver Olympic Games Organising Committees; the IOC technical institute - AISTS; the Hay Festival of Literature and the Arts; through the WAG Sustainable Development Division;
- GEO have already compiled a practical toolkit for greening golf events, which includes the strategic event planning guidance, procurement policies, best

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**Legacy Aims for The 2010 Ryder Cup**

- The active engagement of partners - in delivering the initiative and promoting activities and achievements
- The production of new international Guidelines for Sustainable Golf Events
- An official carbon footprint, providing a methodology for reducing and reporting on sustainability initiatives at other golf events
- A demonstration of how global sporting events can contribute directly to the delivery of government sustainability policies and objectives
- The integration of new sustainability criteria into the selection process for the 2018 Ryder Cup
practice checklists, data sheets and communications plans that were produced for Ryder Cup 2010. The aim is that these will be designed, published and promoted by GEO and partners from mid 2011.

During early 2010, GEO produced a suite of sustainability selection criteria for candidature and selection of future Ryder Cup countries and venues. The nations bidding for the 2018 Ryder Cup have already reported back against these criteria as part of their candidate submissions.
Meeting Our Targets

THE STEERING GROUP set challenging but realistic strategic goals, which required the support and commitment of multiple partners, suppliers and contractors. Here’s how we performed...

Zero waste event

Some waste streams could not be recycled or reused, e.g. carpets and cloth linings in the hospitality and catering pavilions. This is a recurring issue for many sporting events and an alternative approach / material is required. Overall, we achieved a re-use and re-cycling rate of 87%, which covered set up, staging and take down.

Maximise the use of shared, public transport

Additional trains were provided from London to Newport, combined with significant new investment in Newport Station. Spectators arriving by train, and all large staff groups were shuttled in to the venue by coach. Efficient park and ride provision significantly reduced car idling times. There were some limiting factors on rail travel - the most significant being the capacity of the main line into Newport.

Reduce the number of deliveries to site by 10-15%

We found that the suppliers of the bulkiest materials - tentage, grandstands, furniture and fittings were already extremely efficient in their delivery systems - with well planned logistical and operational procedures. The biggest scope for reduced delivery to site was in the customised logistics for food and catering supplies. The two lead catering contractors worked together to establish a centralised delivery point, from which all joint catering deliveries were made. This led to an estimated 33% reduction in catering related vehicle journeys.

Air travel represents by far the largest component of an international golf event’s environmental impact, and represents a clear focus area for the future.
Ensure no deterioration of environmental quality

The entire event, from staging to take down, was delivered without incidence of pollution to water or soil on the site. Indeed the organisers care and attention to site protection was the catalyst for a number of new investments to reduce pollution risk. These included the installation of a new ‘closed-loop’ washwater recycling unit at the golf course maintenance facility; ‘do and don’t’ guidance for suppliers and contractors; and the use of ‘cordons sanitaire’ along significant ecological hot spots such as the River Usk.

Transition to cleaner, renewable energy supplies for powering the event

Beyond the raft of energy efficiency measures undertaken, the most significant measures to transition energy supplies were: the transition of Celtic Manor Resort’s energy supply to a green tariff, the use of recycled vegetable oil to power the main tented village area.
Make spectators aware of sustainability issues and involve them in contributing to the solutions.

In an effort to engage spectators we combined a range of traditional and more innovative approaches. We used websites, e-newsletters, print media and on site signage, combined with video and advertising vignettes that were played through the tournament TV network - into hospitality units and on big screens. Spectators were interviewed about green matters as part of official spectator and ticket holder surveys.
As a wrapper for all efforts to reduce the resource consumption and non-renewable energy use of the event, the independently commissioned carbon footprint has presented the following figures:

- Business As Usual Estimate - 38,596 tCO2e
- Actual Ryder Cup 2010 footprint - 27,411 tCO2e

This represents a 31% reduction of footprint as measured against the business-as-usual reference.

Both sets of figures take into account the extra day’s play that was required due to bad weather.

These figures also take into account spectator travel, which accounted for 96.2% (BAU estimate) and 95.4% (Actual) of total carbon emissions.
Lessons Learned

Leadership

The desire to stage a more sustainable event has to come from the top of the decision making hierarchy - most importantly from the organisation that owns the event, but also ideally from the executives of significant partners, including governments, sponsors and contractors. Of course this leadership has to be met with commitment and buy-in from project managers and those coordinating delivery on the ground.

The 2010 Green Drive highlighted that the stronger and more visible the leading sustainability commitment is, and the earlier it comes, the more quickly the expectation for partner contribution can be established. In this way, strong leadership helps to spread the load across all stakeholders.

A clear vision, accompanied by a tight framework for delivery, can empower many delivery partners. For the Green Drive it was clear that many of those delivery partners were ready, willing and able to play their part.

Collective Planning

Collective strategic planning is critical, but it has to be efficient. A Sustainability Steering Group is the starting point. A group of the most relevant and influential bodies, well coordinated and working to clearly established scope, aims and objectives will ensure the plan is comprehensive, credible and yet remains practical, relevant and outcomes focussed.

Partners need to allocate resources to enable expert coordinators and experienced technicians to make plans,
consult and present to stakeholders - to ensure that vital strategic to operational connections are made quickly and effectively.

Lead in times are shorter than they feel. The 24 month lead in to an event of this size passes very quickly. Frameworks of agreed aims, objectives, priorities and practical deliverables need to be in place at least 24 months out from the event, allowing partners to define macro scale outcomes well in advance, and leaving time to react to and realise the multitude of small scale, late stage opportunities, which are identified in the last few months before the event.

The period immediately following the award of contracts is incredibly dynamic as the details of delivery are put together and as new and often unforeseen challenges and opportunities arise.

Sustainability needs to be communicated to all contractors and suppliers at the very earliest opportunity - to give them time to frame their own contributions as part of the tendering exercise. This enables a large number of companies to adapt proposals so that they contribute towards, rather than against, a lighter footprint event.

**Practicality**

Any initiative to green a golf event has to quickly find practical, relevant and realistic ways to integrate sustainability into complex decision making and implementation. Too much strategic planning discussion can result in loss of interest and engagement with those that actually deliver the fabric of the event.

**Media Engagement**

The more that event owners, such as RCE, can empower others to deliver on the technical aspects of sustainability, the more they are released to play perhaps their most significant role - partnership building and communications. With the global media bringing visibility to the event, a focus on environmental communications is incredibly valuable to society as a whole, and of course in driving the profile of the events partners. Sustainability communications is technically complex and to be done well needs creative flair combined with good grasp of the subject matter. There is a fine, often invisible, line between inspiring environmental communications and green-wash. Done well, and events like the Ryder cup can be highly prized for engaging a wide cross section of audiences with important messages presented with style.
**Sponsor Engagement**

Putting sustainability on the events agenda, and presenting it well, is likely to receive strong support from existing and potential sponsors - particularly the ‘Corporate Responsibility’ minded international corporations that support major golf events. Offering some sustainability based assets, rights and benefits could be a significant value add to traditional sponsorship packages.

**Event Venues**

The social and environmental performance of golf tournament venues is a hugely important foundation for the overlay of staging. Venues with good community relations, tangible examples of resource efficiency and demonstrable benefits to landscapes, ecosystems and culture provide a strong platform to build event sustainability around. Conversely, venues carrying legal disputes and legitimate negative profile on environmental, social and cultural grounds can set a tone of negativity and defensiveness around event staging and communications opportunities. Sustainable development of new venues, and credibly certified management of venue operation are fundamental pillars for showcasing sustainability around golf events.
THE SPECTACLE of team competition between some of the world’s most talented golfers fronts an incredibly complex effort of event planning and logistics in a natural environment.

In this way global sporting events like The Ryder Cup present a unique opportunity to visibly connect world class sport with environmental and corporate responsibility.

The 2010 Ryder Cup Green Drive demonstrated that a carefully planned, scoped and implemented approach to sustainability is not only achievable - it can add real value to all those that administer, host, sponsor, supply, attend and even watch the event.

Jonathan Smith  
Chief Executive  
Golf Environment Organization
THE 2010 RYDER CUP showcased many aspects of the Welsh landscape and culture in front of a global audience. We are delighted that the event also contributed to our world leading policies on sustainable development, as set out in our One Wales, One Planet strategy. We are proud that one of the legacies of the event will be heightened awareness and action in sustainable sport and sustainable events around the world in the future.

Jane Davison
Welsh Assembly Government Minister for Environment, Sustainability and Housing