



GEO Certified[®]

GEO Certified[®] Report Portmarnock Golf Club

Prepared by Independent Verifier, Matt Johns

Certified by GEO Foundation: July 2019
Valid until: July 2022

GEO Certified[®]



**GEO
Foundation**
Sustainability in and through golf

“A good range of understanding and commitment from the club is evidenced in many ways ranging from an investment in naturalising the course over the last 20 years to proactively fostering a good relationship with their wider community.”

Matt Johns



Introduction

GEO Foundation is pleased to confirm that Portmarnock Golf Club has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly developed modern sustainability Standard of best practice.

Portmarnock Golf Club has:

1. Met all the required certification criteria for sustainable golf operations
2. Successfully completed the official third-party verification process
3. Successfully passed the final evaluation by GEO Certification Ltd. (autonomous subsidiary of GEO Foundation)

GEO agreed with the conclusions of the official verification report, that, having achieved all mandatory criteria; and with specific Continual Improvement Points set for the future, Portmarnock Golf Club should be awarded GEO Certified® status.

For the next three years, Portmarnock Golf Club can therefore claim a position as a credible leader in advancing sustainability in golf – making important contributions in protecting nature, conserving resources and strengthening communities.

The GEO Certified® Report that follows comments on the actions undertaken against the criteria, as observed by the Independent Verifier during the assurance process.

Certification is nearly always the result of a dedicated team effort resulting in many practical and valuable social and environmental results around the golf course and clubhouse. This dedication and leadership is an important part of ensuring the resilience of the golf facility and the golf industry into the future and also as part of society's wider effort to pull together for people and planet.

We congratulate all involved.

Jonathan Smith
Founder and Executive Director, GEO Foundation
GEO Certification Ltd. Board Member

Kelli Jerome
Executive Director, GEO Foundation

Richard Allison
Manager, GEO Certified Facilities



Verification and Certification

Verification

The official third-party audit was carried out by the Independent Verifier accredited by GEO for verification of golf facilities seeking certification.

Verification involved reviewing practices and data, using the International Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. The Verifier then submitted a detailed verification report for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd., an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the Verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified, GEO Foundation also provides a suite of credible and practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at www.sustainable.golf.

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including FairTrade, Rain Forest Alliance, Forest Stewardship Council and Marine Stewardship Council. GEO Foundation earned and retains Full Membership in the ISEAL Alliance following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at www.isealalliance.org.



Verifier's Report

The Sustainability Agenda for golf covers the following themes and action areas:

THEMES	ACTION AREAS
Nature	<ul style="list-style-type: none"> • Habitats & biodiversity • Turfgrass management • Pollution prevention
Resources	<ul style="list-style-type: none"> • Water • Energy • Materials
Community	<ul style="list-style-type: none"> • Partnerships and outreach • Golfing and employment • Advocacy and communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE			
N1 Habitats and Biodiversity			
Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	N1.1.1 Sound understanding of the nature and landscape value of the site	(Course management) Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	Portmarnock Golf Club (PGC) receive support from the STRI which has produced a 10-year course management (ecology) plan. A recent update visit was completed in response to PGC hosting the Amateur Championships. Plans are in place to update this plan. The course management team has an excellent understanding of the course ecology, sensitive habitats, conservation areas, designations, habitats and

			species. A detailed 384 book covering fauna and flora of the course has been published (external sale) which has sold out and received national press coverage.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	(Course management) Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	Very good understanding of the sensitivities and legal aspects of areas the course associated with the adjacent SAC and SPA designations, together with habitat and species requirements. This is supported by the ecological management plan for PGC, external advice from STRI and Dublin Parks and Wildlife. This understanding feeds into course management and protection of sensitive areas.
	N1.1.3 Understanding and respect for cultural heritage	(Course management) Protect any archaeological, historical or cultural designations on the site	No formally designated historic features, but high awareness of local heritage from the gifting of the land in the 19 th Century from the Jameson Family, development of the agricultural land into the links and the original access to the club by boat or horse and cart over the estuary and low tide. History is highlighted within the clubhouse and externally with the club bell, which used to be rung for the last ferry home! A walking tour is allowed on the club land to include these aspects.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	(Course / club management) Observe, track and / or monitor golfer play	The play of the club is focused on narrow fairways and managing the rough to promote flowering grasses and other flora whilst enabling ball recovery. Monitoring of areas of play occurs through observation and feedback, but if anything there is a trend to naturally increase the rough to promote the style of the course in this way.
N1.3 Actively manage habitats for wildlife	N1.3.1 Projects to manage habitats in the best way for wildlife and golf	(Course management) Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	A habitat management plan has been produced which influences course management alongside professional judgement, response to emerging issues and advice from Dublin Parks and Wildlife. The club has invested heavily in restoring natural native grass species (fescues and bents) which promotes natural habitats throughout and a low intensity course management system. Habitat restoration projects (e.g. wetlands, dune slacks, new fixed dunes) prioritise native species using materials from within the course and natural recolonisation.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		The PGC ecological management plan and other guidance promotes practical conservation measures (e.g. dunes, slacks, wetlands, grasslands, salt marsh) and protection for rare, notable and prominent species (e.g. orchids and hares). There is space to have a large amount of ecology habitat beyond the rough which typically requires little or no management intervention. Scrub management occurs to promote dune habitats, through agreement with Dublin Parks and Wildlife. The club has a naturalised approach to dune management, allowing natural geomorphology to proceed. Currently there is no need to actively intervene (e.g. to stabilise) and mobile dune systems have been allowed to develop where they exist.
N2 Turfgrass			

N2.1 Maintain optimum turf and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	(Course management) Select appropriate grass species for climate	The club has invested heavily with the naturalisation of the playing surface over the last 20 years resulting in dominance by natural bents and fescues, typical of the local links environment. This results in a low intensity system that can cope with prevailing climatic conditions (wet and dry) so that low levels of water and nutrients are needed.
	N2.1.2 Practices to maintain good soil structure and condition		Aeration requirements are low (e.g. every 2 years) and the dominance of sand (including dressings from sand sourced within the club land) limits the build up of thatch. It is a very well drained course, with only limited artificial drainage required. The playing surface is also close to the water table allowing a closed system of water abstraction and reuse (at minimal levels) within the hydrogeological system associated with the course land.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	(Course management) Soil tests and nutrient analysis	Due to the reasons described above, fertiliser input requirements are very low. Aeration requirements are low. Monitoring occurs every two years as a result informing management. Visual inspections drive interim management requirements in particular for greens.
N2.2 Prioritise cultural management	N2.2.1 Non-chemical pest, disease and weed management	(Course management) Sharpen mowing blades; Remove surface moisture; Hand weeding	Hand pulling occurs on all greens. The culture adopted by PGC is low intensity and fortunately there are limited issues associated with pests so non-chemical management dominates the approach.
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	(Course management) Establish patterns and levels of risk for pests and diseases; Scout the course daily for early signs of pests and disease; Accurate pest and disease identification; Map and track pest and disease hotspots; Establish pest and disease thresholds	There is a low intensity/frequency requirement for chemicals. This is restricted to use of glyphosate or paraxis for spot treatment of problem areas if necessary on greens, tees, surrounds and local and infrequent use of gramicides (last used two years ago). Currently no need to treat for pest animals (last applied 5 years ago). Fungicides have not been used for 13 years.
	N2.3.2 Application of chemicals with full safety precautions	(Course management) Use only legally registered and approved products; Ensure staff are fully qualified and licenced to use pesticides; Regularly calibrate and test applicators; Use appropriate protective equipment; Dilute and dispose of leftover product on untreated areas of turf	All legally required and best practice measures are implemented at PGC.
N3 Pollution Prevention			

N3.1 Prevent pollution across the entire site	N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations	<p>(Course management) Document procedures for emergency spill responses; Maintain mowing buffer zones around water and all ecologically sensitive areas; Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas; Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas.</p> <p>(Club management) Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and waste water discharge</p> <p>(Course management) Ensure wash areas are on impermeable, leak-free surfaces; Mixing and loading of pesticides and fertilisers over an impermeable surface; Triple rinse pesticide containers and applicators</p> <p>(Course management) Maintain a register of hazardous materials available to authorised staff;</p> <p>Safe storage in secure and ventilated concrete or metal building;</p> <p>Sufficient storage capacity; Impermeable flooring; Spill containment kits present;</p> <p>Emergency wash area;</p> <p>Fire extinguisher in the immediate area;</p> <p>Secondary containment for fuel, either externally constructed, or integrally manufactured;</p> <p>Regular inspection of storage tanks</p>	<p>All legally required and best practice measures are implemented at PGC.</p> <p>Generous buffer zones are applied to wetland e.g. 25 m.</p> <p>Aerial images are used via smartphone-based apps and cloud systems to map and manage specific areas as required.</p> <p>All legally required and best practice measures are implemented at PGC.</p> <p>All legally required and best practice measures are implemented at PGC.</p> <p>Clubhouse hazardous materials are stored in an internal locked rooms and cupboard identified as such.</p> <p>PGC has a very high quality green keeping facility and area. All areas are fully bunded with chemicals stored and mixed inside a fully bundld bespoke chemical store building.</p> <p>All legally required and best practice measures are implemented at PGC.</p> <p>All relevant documents are maintained and available in the course manager's office.</p> <p>PGC has a very high quality green keeping facility and area. All areas are fully bunded with interceptors and tanks.</p> <p>Fuel (petrol and diesel) is stored in double bunded underground tanks. Fire control measures are in place.</p> <p>Spill kits are present. Staff are trained.</p>
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations		
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations		
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances		
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate waste water usage and discharge licences	<p>(Course management) Waste water discharge licence;</p> <p>Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)</p>	<p>All wastewater from all facilities is treated on site in a biodigester before being discharged to soak away within the centre of the course where further dilution occurs with the local groundwater which is then harvested via wells and diluted further with recovered runoff and used for course irrigation in a full site circular water cycle. Specialist hydrogeological advice was sought and the EPA have been involved with registering the abstraction.</p>

RESOURCES

R1 Water

Objectives	Requirements	International Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	(Course management) Target irrigation to essential playing surfaces only	The course management and turf species selection minimises the need for irrigation resulting low demand/usage. Members are not demanding bright green fairways and enjoy the traditional summer links look. Sophisticated Toro irrigation is used that is computer controlled with smartphone/cloud interaction, allowing targeted watering where only necessary, informed by soil moisture and weather conditions.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	(Course management) Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas; Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	Soil moisture readings occur. Consideration of investing in Pogo systems and cloud data integration. Toro irrigation software is used (see above). Staff are trained.
	R1.2.2 Practical measures to use water more efficiently in buildings	(Club management) Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	Annual review of water bills focusing on cost as the key metric to help drive down usage and cost. Low maintenance course supports relatively low water demand. Future proposals to install water meter (wells are metered and reported). The club uses far less than the maximum amount licenced for abstraction. Water saving measures are implemented in the clubhouse and are typically built in (e.g. infrared taps and dual flush toilets) to remove the need to ask members/visitors to minimise use.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	(Course / club management) Ensure appropriate water abstraction permit and reporting, as required	Abstraction from wells has just required registration with the EPA. This has been completed.

R2 Energy

R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in course maintenance	(Course management) Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	Course management approach at PGC minimises the amount of managed turf. It is a low intensity system in any case which promotes the greater areas of rough and out of play habitats helping to reduce energy consumption on the course.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Club management) Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	Quarterly energy expenditure reports are prepared to support reducing consumption and spend. An energy audit for the greenkeeping function has been commissioned and report is awaited.
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	(Club management) Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	A proportion of the current electrical supply is sourced from Irish renewable sources. The club is investigating opportunities for future renewable generation on site including solar photovoltaic and heat pumps. It plans to support electric cars when demand requires this.
R3 Materials			
R3.1 Reduce materials demand	R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives	(Club management) Undertake a review of materials consumed	PGC is a low intensity system and seeks to source materials from its own land and operations where possible (e.g water, sand, divot repairs) minimising the need for materials import. PGC sources locally wherever possible. PGC seeks to minimise non-recyclable materials if identified as an alternative but typically at the current time the focus is on sourced appropriate high quality and necessary materials. Future plans include more visible use of eco labels and sustainable supply policy.
R3.2 Purchase responsibly	R3.2.1 Practical use of an ethical / environmental purchasing policy	(Club management) Adopt a sustainable, or ethical / environmental purchasing policy to maximise the use of locally sourced goods and goods made from recycled, recyclable and certified materials	PGC has an inherent policy for sourcing from local supply in particular for the catering function, but this also extends to Dublin with nearly all supplies of materials being sourced from Ireland (typically with the exception of any imported machinery/vehicles not manufactured in Ireland).
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	(Club management) Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	PGC separates its waste streams into reused on site, recycled and non-recycled. This is collected in the greenkeepers compound for external collection. All appropriate waste certificates are in place. It provides potable water on the course promoting the use of reusable water bottles. Future plans include the recovery of cardboard and food waste within a composting area at the club for reuse on the course (e.g. in divot repairs). Waste generation is measured through an annual review of cost.

R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	(Club management) Use authorised waste and recycling contractor for general, hazardous, industrial and green waste;	All relevant and required certificates are in place.
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COMMUNITY			
C1 Outreach			
Objectives	Requirements	International Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	C1.1.1 Social and recreational activities at the facility		PGC is a traditional high quality club and as such is golf focused, in response to the wishes of its members. Social functions are regularly arranged and this extends to a group for older members with an annual dinners, youth and local volunteers.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		There are a good range for volunteering e.g. in competitions (e.g. over 200 volunteers were involved in the Amateur Championships in 2019). The club provides support to local schools with children visiting and playing with a Junior Foundation and youth BBQ event. The club makes a number of annual donations to and supports charities. The Captains Charity Day is a significant fundraiser.
C1.3 Establish active community partnerships	C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups	(Club management) Create a 'sustainability working group'	The club has good relations with local neighbours although its estuarine/oceanic setting limits the number of direct neighbours. It supports local businesses in Portmarnock and has a good relationship with adjacent golf clubs sharing advice, equipment and volunteers. Information of the club's activities are visible on its website and social media feeds.
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		Due to the passion for golf and its traditional benefits inherent in its membership/visitors, the club does not feel the need to promote health and wellbeing in a specific way at this time but would consider this for the future.

C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	(Club management) Demonstrate inclusive policies for members and visitors	No policy is in place at the current time, but the club has a very open policy on inclusion and provides support to a wide range of needs and expectations, framed within a traditional golf club setting.
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	(Club management) Follow all relevant national legislation and best practice for employment, health & safety etc	The club implements all required legal and best practice measures for employee net and professional development.
C3 Communications			
C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	(Club management) Provide information on the facility's sustainability commitments, actions, or achievements	<p>The club has a good quality website and uses twitter and instagram for broader social medial presence. It receives press interest from hosting annual press days, through coverage of events e.g. the Amateur Championships, publication of its book on flora and fauna and other initiatives.</p> <p>There are regular communications from the General Committee which manages the environmental/sustainability aspects of the club's operations. There are weekly members newsletters and more detailed spring and autumn newsletters.</p> <p>It is planning to use achieving GEO Certified as a launchpad to promote its sustainability actions and agenda.</p>
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	(Club management) Provide evidence of external communications and community engagement	It is planning to use achieving GEO Certified as a launchpad to promote its sustainability actions and agenda

Golf and Sustainability

Among all sports, golf has a particularly close relationship with the environment and communities, golf facilities can bring many benefits to people and nature - from the protection of greenspace and conservation of biodiversity; healthy recreation for all ages; local supply chains; and jobs, tourism and other forms of economic value.

Adopting a more sustainable approach is also good for golf. It's about presenting a high-quality golf course and providing a memorable experience in natural surroundings. It's about being as efficient as possible. And it's about supporting the community in a range of ways that bring increased recognition, respect and contact.

At a broader level, it's important that golf credibly demonstrates its commitment, and its social and environmental value - strengthening the sport's image and reputation for the long term.

Golf facilities that participate in OnCourse®, an international sustainability initiative assured by the non-profit GEO Foundation, are taking a comprehensive approach and striving to be leaders in the community.

Find out more at www.sustainable.golf