



GEO Certified[®]

GEO Certified[®] Report Golfpark Zürichsee

Prepared by Independent Verifier, Hector Forcen

Certified by GEO Foundation July 2019
Valid until July 2022

GEO Certified[®]

 **GEO
Foundation**
Sustainability in and through golf

“Golfpark Zurichsee is proud to have been involved in sustainability for more than a decade, gaining multiple certifications including GEO Certified® since 2009, and displaying to partners, stakeholders and club visitors. They are doing things a little better every day and proof of this is the effort and new construction projects of the maintenance area and clubhouse that will undoubtedly help to be more efficient and sustainable in the very near future.”

Hector Forcen

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Golfpark Zürichsee 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.

Golfpark Zürichsee has:

1. Met 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, Golfpark Zürichsee should be awarded GEO Certified® status.

For the certification period stated above, Golfpark Zürichsee 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 club house. This dedication and leadership are 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 an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted 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, 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, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association 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 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 & Outreach • Golfing & Employment • Advocacy & 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	The site was formerly exploited as a gravel quarry before part of it was converted into a golf course about 18 years ago. The golf course is dominated by extensive areas of wildflower meadows in the out of play areas, 6 man-made lakes and biotopes which separate the golf holes and

		surveys	provide extensive habitat for birds, amphibians, mammals and insects. The club is still strongly dedicated to maintaining a high landscape quality and continues to collaborate with a number of nature and heritage organisations. The construction of the second nine holes has ended successfully and the golf course is operative for members visitors. The natural areas have increased by 20%. The quarry is still doing its normal activity. The area of the quarry that is already being exploited is being filled with external soil inputs to try to resemble the natural terrain existing years ago.
	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	The club continues to cooperate closely with WWF, the ANL and ProNatura and is guided by a local environmental consultant. With the construction of new holes, new natural areas have been built, creating shelters and wet areas.
	N1.1.3 Understanding and respect for cultural heritage	(Course management) Protect any archaeological, historical or cultural designations on the site	Gravel pit integrated on the course. Both activities run daily sharing common spaces. An example is the transportation belt from the pit gravel cross the fairway 18th and works every day. The club install several kms of metal protection to avoid any problems in terms of security for the golfers.
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	GPS system is been install in all the new 20 electrical buggies. This system allows a control of the vehicles in the course and the prohibition or blockage of certain natural areas for which they will not circulate, protecting fauna and flora from the damages and inconveniences that they may cause.
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	The club has been working since the beginning with various environmental organizations as well as prestigious professionals in the environmental field. Natural areas have been created for amphibians, the local fauna and flora are protected, the presence of different species of dragonflies in the humid zones has been documented, as well as an area of beehives where the bees help pollination as well as the production of natural honey.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		Salamander area qualified by the government of natural importance. Formerly it was a wet area of the quarry which has been protected and naturalized and salamanders have appeared.
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	<p>The maintenance team keeps searching and testing the most suitable turf varieties in different nurseries and they behave better in the area. Following the results obtained in nursery it was decided to take the decision to use new varieties for the construction of the second nine holes, emphasizing the mixture of greens composed of new varieties of Agrostis such as 007 and Pure Dynasty and some Fescues presenting very satisfactory results in what refers to game quality and winter fungal diseases. Poa, rye and fescues for fairways and tees. They have been testing on the nursery for 6 years. The greenkeeping team is always ready to improve and experiment.</p>
	N2.1.2 Practices to maintain good soil structure and condition		<p>The cultural practices are preferential for Golf Club Zurichsee. The Head Greenkeeper prefers to try more mechanical treatment to improve the root zone of the turf, helping to remove soil compaction and a better irrigation and aeration obtained what results in deeper rooting and healthier surfaces. Numerous and diverse cultural practices that perform every year the different surfaces. The poor quality of the soils used in the construction of the fairways requires numerous cultural tasks including 8 annual topdressings. The club keeps investing in new machinery more efficient and productive for the greenkeeping department.</p>
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	(Course management) Soil tests and nutrient analysis	<p>In terms of fertilization, they carry out an annual control with analytics, and the applications are made mainly of liquids with trace elements with a single supply of granular fertilizer per year. 55 uN / are been applied this year on greens. In the new holes due to the poor quality of the land with a lot of stones, an application of granulate has been made in the rough.</p>
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	<p>New sharpening units have been acquired, which are faster and more efficient. No herbicide treatments are applied on the golf course.</p>
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	<p>Diseases are closely monitored, and when problems are noticed, local corrective actions are taken. Preventive treatments are not applied. The use of new turf varieties on the new greens has reduced the number of fungicidal treatments for winter diseases to zero. It is important to emphasize the careful and studied nutritional program that reduces the applications of N to minimal helping to control diseases. The use of the roller in greens 3 times per week has very positive effects on the dollar disease which has been reduced to a minimum. Pest & diseases thresholds: 10 % Greens 20 % Fairways y Tees</p>
	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	<p>The use of phytosanitary products has been reduced to a minimum. The applications are made by perfectly trained and qualified employees using the necessary security measures. Respect the security perimeters</p>

		<p>licenced to use pesticides; Regularly calibrate and test applicators; Use appropriate protective equipment; Dilute and dispose of leftover product on untreated areas of turf</p>	<p>established by Swiss law in humid and natural areas. This year has been acquired a last generation treatments sprayer with GPS System that will allow to make localized treatments and with high precision and low doses on fairways.</p>
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>The security perimeters established by Swiss law are respected. There are no treatments in the rough areas, wet areas and near lakes.</p>
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	<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>This point will be improved with the new clubhouse construction planned for the next few years.</p>
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	<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>In the coming months work will begin on the construction of the new maintenance area which will be equipped with numerous new recycling systems and use of resources. These include the installation of the W2W system to filter and reuse the water on the washing area for machines, a room for the storage of chemical products from the same brand as well as the installation of solar panels to produce electricity. The inauguration is foreseen in spring 2020.</p>
N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	<p>(Course management) Maintain a register of hazardous materials available to authorised staff; Safe storage in secure and ventilated concrete or metal building; Sufficient storage capacity; Impermeable flooring; Spill containment kits present; Emergency wash area; Fire extinguisher in the immediate area; Secondary containment for fuel, either externally constructed, or integrally manufactured; Regular inspection of storage tanks</p>	<p>Records of products and treatments are maintained. Respect the cantonal environmental regulations as well as the recommendations of groups of experts and environmental associations. Washing area in new maintenance hall with 3 washing hoses to be more efficient and avoid queues especially with manual machines.</p>

<p>N3.3 Responsibly manage waste / storm water</p>	<p>N3.3.1 Appropriate waste water usage and discharge licences</p>	<p>(Course management) Waste water discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)</p>	<p>With the construction of the back nine, two new lakes have been built, which help to filter and improve the water. Analysis carried out by the cantonal laboratory say that the water in the lakes could perfectly be served bottled due to its high quality.</p>
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<h2>RESOURCES</h2>			
<h3>R1 Water</h3>			
Objectives	Requirements	Mandatory Practices	Verifier Notes
<p>R1.1 Minimise water demand</p>	<p>R1.1.1 Measures to reduce the need to consume water</p>	<p>(Course management) Target irrigation to essential playing surfaces only</p>	<p>The complete renovation of the irrigation system has been done installing new more efficient sprinklers, as well as a new control system. Efficiency has been achieved thanks to individual sprinkler control, quick valves for hand-watering, nozzle technology has also allowed an improvement in distribution and uniformity on the application of water. The moisture content is measured daily on greens using the TDR moisture sensors, and surfactants and penetrants are used to improve water infiltration and soil moisture retention. Emphasize that they have a single row irrigation system on fairways and the roughs are not irrigated. In tees, smaller sprinklers have been chosen, with the possibility of combining 20 different nozzles to improve the adjustment and considerably reducing the amount of water.</p>
<p>R1.2 Maximise water efficiency</p>	<p>R1.2.1 Practical measures to use water more efficiently on the golf course</p>	<p>(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</p>	<p>Daily measurements are made with the TDR before planning the night irrigation to adjust the amounts applied. The new irrigation system is more efficient by watering less and better. Irrigation bags have been installed in the new trees of the new holes.</p>
	<p>R1.2.2 Practical measures to use water more efficiently in buildings</p>	<p>(Club management) Audit water use regularly; Review bills frequently and look for</p>	<p>Water saving activities are in place including the use of low-flow urinals and toilets, pressure reduction nozzles on taps, timers on showers and water awareness signage in toilets and changing rooms.</p>

		irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	New club house much more efficient waiting for permission to start the works.
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	The club has legal access to extract 1800 m3 of water per day from the Lake of Zurich but in the last number of years they have taken almost none. Almost all water for irrigation comes from rainwater stored in the many on-site lakes. A well discovered on site help to supplement any additional irrigation needs and also provide water for the maintenance area.
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	With the construction of the new holes the naturalized areas of the club have been increased by 20%. The maintained rough has been diminished 50%, cutting now the rough of 18 holes in the time that they used to cut the rough of the old 9 holes. A controlled and adjusted fertilization program together with the application of growth regulators is allowing to reduce the mowing frequency in fairways and tees from 3 to 2 with the consequent energy saving that it supposes.
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	The club has installed a number of energy saving measures including low energy lighting and motions sensors as well sunlight pipes heating water for showers. They are connected to the local green grid supply, use biodiesel and electric buggies. With the construction of the new maintenance facility and new clubhouse the efficiency at the club buildings will be considerably improved.
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	Existing buildings use sunlight pipes (like solar panels) for hot water for shower. It is planned to install solar panels in the new maintenance as well as in the club house.
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	(Club management) Undertake a review of materials consumed	During the winter the greenkeepers team is dedicated to the reduce to parts and sale old machines, avoiding the complete machine being taken to the dump.

	alternatives		
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	Attempts are made to buy products not manufactured in the area at origin reducing the carbon footprint. Local distributors are used and the furniture of the golf course has been built by local companies in the area and other departments of the Kibag company itself.
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	Almost all waste is recycled or reused, including PET, aluminium, metals, glass, paper and cardboard. All material from the golf course including grass clippings, cores and leaves are recycled/composted and reintroduced to the site. Wood from removed trees is used for creating brush piles and habitat areas. Other wood is reused for building shelters on the golf course. Materials from the kitchen and maintenance area such as detergents, oils, lubricants, pesticides and batteries are collected and disposed of by registered uplift. Old machines like golf carts are put to new use for other purposes to prolong the life of these vehicles.
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;	Regarding the golf course and its maintenance, all regulations are complied with. It also collaborates with various environmental agencies and reports are made by University experts.

COMMUNITY			
C1 Outreach			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	C1.1.1 Social and recreational activities at the facility		The club is fully open to visitors who can practice golf and use the facilities as well as organize events, seminars and weddings. The local schools practice golf in their physical education program at the club. Golf course tours are organized to teach the life sciences of

			the lakes and natural areas with their diverse flora and fauna, this program is receiving an important acceptance and young enjoy the visit .
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		An older house on the golf course property is to be used as on-site accommodation for apprentices coming from US and other parts of the world who wish to gain experience from a Master Greenkeeper in Switzerland. The mother company Kibag is involved in numerous volunteer events and solidarity actions.
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'	A public nature trail leads around the golf course with numerous interpretive boards explaining the importance of biotopes and habitat structures. About 10 nature walks are organised per year to explain to visitors the various habitat areas maintained. A horse-riding trail is also well used around the perimeter of the course. The club regularly cooperates with local school and professional groups to do on-site habitat construction projects such as building stone walls, constructing nesting boxes or bee hotels. There is a group formed by different people from different government agencies and organism (WWF, ProNatura; ANL, local bird watching club) meeting several times a year to discuss issues of sustainability and ecology related to the club.
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		The club takes care of its employees and makes available non-alcoholic beverages, coffee, sunscreen, telephone line, uniforms and all the necessary safety equipment for the correct and safe performance of daily tasks.
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	Golf Zurichsee is a golf course open to members and visitors, as well as users to restaurant and events.
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	Greenkeeping staff continue to receive regular education on pesticide handling, habitat management, safety and waste administration.
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	The club communicates its environmental activities at the club with an eco-table, posters and a company magazine. The club also has a facebook page which they keep up to date with new events and environmental messages. A good atmosphere and relationship with the members is perceived,

			there is a direct and fluid communication between players head greenkeeper and employees.
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	The golf club has a good relationship with their surrounding neighbours and local businesses. A member of the golf club is present at local political meetings.

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