

GEO Certified® Report Golfclub Engelberg-Titlis

Prepared by independent verifier: Ludwig Glöcklhofer

Certified by GEO Foundation: 2023

Recertification due: 2026



"Golfclub Engelberg-Titlis captivates visitors with its unique location and natural surroundings. This well-maintained course takes its environmental responsibilities seriously and is making strides towards the future of golf. The maintenance program uses solid mechanical practices, and despite the limited space, the site has great potential for creating small-scale habitats, which the club will explore in the coming years. I eagerly anticipate more projects that focus on better resource management and sustainability measures in the near future."

Ludwig Glöcklhofer (GEO accredited independent verifier)



Introduction

GEO Foundation is pleased to confirm that Golfclub Engelberg-Titlis 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 and transparently developed modern sustainability Standard of best practice.

Golfclub Engelberg-Titlis 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 (CIP) and Critical CIP's (CCIPs) to be reviewed at recertification, Golfclub Engelberg-Titlis should be awarded GEO Certified® status.

For the certification period stated above, Golfclub Engelberg-Titlis can therefore claim a position as a 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, maintenance facility and clubhouse. These dedication and leadership qualities 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

Carole Kerrey

Manager, Data and Reporting, GEO

Certification Ltd.

Colet



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



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

THEMES	ACTION AREAS	
	Habitats & Biodiversity	
Nature	Turfgrass management	
	Pollution prevention	
	Water	
Resources	Energy	
	Materials	
	Partnerships & Outreach	
Community	Golfing & Employment	
	Advocacy & Communications	

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

NATURE	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	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	The 18-hole golf course is at the foot of Mount Titlis and is harmoniously integrated into the landscape. The golf course is easily accessible and located near the village of Engelberg, at an elevation of around 1,100 meters above sea level.	

			Highlight: The club is aware of the unique natural surroundings and created a landscape conservation plan with a map in 2023, showing vegetation types and their ecological potential.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	Currently, there is a habitat description and a list of the trees located on the golf course. CCIP: Please create a comprehensive list of the terrestrial and aquatic flora and fauna present on the golf course to optimize maintenance measures for target and key species. CIP: Please work with local environmental specialists to implement measures efficiently and cost-effectively.
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	There are no protected or listed heritage objects within the golf course perimeter.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Observe, track and / or monitor golfer play	The golf course operator is actively collaborating with external specialists to extensively convert as many intensive lawn areas as possible to promote native biodiversity. CIP: Please consider monitoring players' movements to identify underutilised areas with potential for naturalization.
N1.3 Actively manage habitats for wildlife	N1.3.1 Projects to manage habitats in the best way for wildlife and golf	Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	During the construction of the facility, as well as for replacement plantings, only native species are used. There are several microhabitat sites on the course, such as stone walls, piles of deadwood, stone piles with sandy areas, and wild bee boxes. To promote biodiversity and site-appropriate habitats, nutrient-rich meadows were converted into nutrient-poor meadows by removing the topsoil. The golf course is located on a wildlife corridor.

			CIP: Please discuss which structures can be created to increase the continuity of the corridor on the golf course. CIP: The transition zone from the forest to the meadow should be designed with more gradation. Graded forest edges with shrubs exhibit high biodiversity. CIP: Please try to create microstructures in the aquatic habitats to promote amphibians. CIP: Please consider using only local genotypes in the flower meadows.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		CCIP: Please create a list with priority species of flora and fauna. Rare species that occur in the area can thus be specifically promoted. Please involve an external specialist or local nature group in these efforts.
N2 Turfgrass			
N2.1 Maintain optimum turf and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	Select appropriate grass species for climate	The head greenkeeper frequently engages with suppliers and experts to share knowledge. This ongoing exchange of insights is intended to determine and implement appropriate cool season grasses for the location, fostering ideal conditions for the existing grass populations.
	N2.1.2 Practices to maintain good soil structure and condition		The head greenkeeper employs best practices for mechanical soil treatment. During the short season, hollow tines are used for aerification twice, and solid tines are used at regular short intervals. Both measures are carried out in conjunction with sand applications. Regular topdressing is done every 2-3 weeks.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid overfertilisation	Undertake soil tests and nutrient analysis	The analysis of macro and micronutrients in the soil takes place at the end of the season and serves as the basis for fertilizer planning for the following year. CIP: Please consider whether fertilizing the rough is necessary. Reducing nutrient input in the rough would promote biodiversity.

N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	Blades of the mowers are regularly maintained and sharpened. Dew is mechanically removed. Additionally, a wetting agent that reduces dew formation is used. CIP: Please explore the cost-benefit effect of chemical wetting agents, especially those aimed at reducing dew.
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	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	The head greenkeeper adopts a modern, restrained approach to the use of synthetic pesticides. With his many years of experience, he knows the locations where diseases spread first and relies on natural plant health through optimal nutrient supply. Synthetic fungicides are used exclusively curatively. In 2023 there were two treatments with synthetic fungicides. Due to sustainability and plant health, the head greenkeeper is continuously replacing mineral fertilizers with organic fertilizers. CIP: Please create a map of intensive turf areas, highlighting problem spots caused by pathogens.
	N2.3.2 Application of chemicals with full safety precautions	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.	Only products that are approved in Switzerland are used in greenkeeping. Two people are in possession of a license to apply synthetic pesticides. The field sprayer with a cab complies with the prescribed regulations in Switzerland. The protective equipment, including the field sprayer, is in the condition required by Swiss law. Because the chemicals were not fully placed on a spill basin at the time of the visit, such basins were promptly purchased and will be installed shortly. CCIP: Please store every chemical, oil, above a spill basin.

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	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.	An emergency spill plan is available and displayed on several places. The club is respecting the security perimeters established by Swiss regulations in wetlands and natural areas. Mowing buffer zones are located around ecologically sensitive areas. CIP: Please consider creating a map with defined buffer zones around ecologically sensitive areas. CIP: Please consider conducting a chemical analysis of the water from the water hazards and wetland biotopes.		
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge	Storage of hazardous materials in the clubhouse are according to the swiss law. Wastewater discharge licence is present. Due to the situation, the Club plans a new machine storage with a washing bay following Swiss standards and regulations.		
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	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	The washing area is situated above a sealed collection pit, where wastewater is regularly pumped out and disposed of in accordance with Swiss regulations. A new machine storage with a washing bay is in the planning phase and will be completed in the near future. CCIP: Please install a grass clipping filter to remove organic matter in the washing and preparation area. CCIP: Please install anti-spill containers to ensure that all oils and operating materials are stored safely.		

N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	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	The head greenkeeper maintains a register of hazardous substances stored and used on the golf course. The fuel tank is regularly inspected for operational safety. Fire extinguishers are installed and clearly marked. An emergency wash station is available. CCIP: Evidence submitted for the purchase of an anti-spill containment system. Please ensure this is installed prior to recertification and that all oil barrels are placed on the containment platform as soon as possible.
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate wastewater usage and discharge licences	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	Wastewater discharge licence is valid for the clubhouse. CCIP: The club is planning a new wash bay and machinery storage area. Please ensure that these meet modern standards and Swiss law.

RESOURCES

R1 Water

Objectives	Requirements	Mandatory Practices	Verifier Notes
R1.1 Minimise water demand	R1.1.1 Measures to reduce the need to consume water	Target irrigation to essential playing surfaces only	Only intensive lawn areas with drought-tolerant grasses are irrigated. The head greenkeeper only irrigates when is necessary, based on his experience and in combination with data from the weather station.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	Conduct regular irrigation performance checks; Provide staff training on efficient irrigation practices; Ensure effective application of water to target areas;	The automized irrigation system is regularly maintained. The sprinklers are adjusted and set to the target areas in terms of intensity. There is a local weather station installed, but this does not correspond with the irrigation system.

		Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	CIP: Please explore the possibility of linking the weather station with the automatic irrigation system.
	R1.2.2 Practical measures to use water more efficiently in buildings	Audit water use regularly; Review bills frequently and look for irregularities; Encourage water-saving practices amongst staff and visitors; Categorise and track water consumption	Confirmed that the club regularly checks the water bill and monitors consumption.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	Ensure appropriate water abstraction permit and reporting, as required	The golf club has its own water source on the perimeter used for the clubhouse and irrigation. CIP: Collecting rainwater for irrigating the golf course is a sustainable way to manage the intensive turf areas ecologically and economically in the long term.
R2 Energy	1	<u> </u>	
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in course maintenance	Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	The club is interested in converting intensive lawn areas into extensive natural areas to save energy and resources. The final allocation has not yet been determined.
			CIP: An external consultant or local nature group shall be engaged to facilitate the identification of potential opportunities and the optimization of maintenance plans tailored to these areas, emphasizing conservation considerations.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	The electricity bills are regularly reviewed and checked. LED lighting is used throughout the facility. Areas accessible to visitors and customers are equipped with motion sensors. The parking lot lighting system is equipped with a night shutdown feature.
			CIP: Please consider engaging an expert on energy to maximize energy efficiency and explore the possibilities of renewable energy.

R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	The Club uses a heat pump as a renewable energy demand. CIP: Please consider engaging an external energy consultant to explore possibilities for other renewable energy sources.
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	Undertake a review of materials consumed	Waste separation is established in the clubhouse and on the course. The club works with a local waste management plant for recycling. All waste is stored according to legislation. They are composting some vegetable material, collected, and used by local farmers. Cores from aerification are reused on the course.
R3.2 Purchase responsibly	R3.2.1 Practical use of an ethical / environmental purchasing policy	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	The club values local products and production. The kitchen in the clubhouse uses food from local suppliers, and the meat comes from a local butcher. Material transports, such as sand, are handled by a local transportation company. The club produces its own elderberry jam. CIP: Consider providing environmentally friendly cleaning products (soap in toilet, facility cleaning products, etc.).
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	The clubhouse is equipped with recycling bins for all major materials, including glass, plastic, metal, paper and batteries. These bins are strategically placed around the clubhouse and are clearly labelled to facilitate proper waste separation. At the golf course there is no waste separation but the greenkeeping team is separating the waste afterwards by hand. CIP: Please explore the opportunity for waste separation directly on the golf course.

R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	Use authorised waste and recycling contractor for general, hazardous, industrial and green waste	An authorized recycling contractor handles the disposal of all hazardous and green waste from the site.

COMMUNITY

C1 Outreach

Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-	C1.1.1 Social and recreational activities at the facility	·	Public hiking trails surround the golf course.
functionality	,		During the off-season, disc golf and cross-country skiing are offered at the golf facility.
			The restaurant is public and open to all visitors.
			The clubhouse has seminar rooms available for public rental.
			During the off-season, the golf course is accessible to everybody.
			CIP: Consider making sponsorships for members for microhabitats, extensive meadows, planting trees or other ecological measures.
C1.2 Provide for volunteering and	C1.2.1 Opportunities available for volunteering and support		The club hosts several charity events each year.
charity	of charities and good causes		The golf club is closely connected to the local community and is present at many local festive activities and offers beginner courses.

C1.3 Esta commun partners		C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups	Create a 'sustainability working group'	Employees are allowed to eat in the club restaurant and have special conditions. They are also allowed to play golf free of charge. There are even regular rounds of golf for employees. Existing items are often donated when the facility is restructured. For example, the local kindergarten received the old bench from the clubhouse terrace. Environmental concerns are communicated to employees, club members and the local population via print media or electronically (social media, newsletter). There is a partnership with a club member who is responsible for the wild bee boxes. A strong partnership with local farmers helps maintain specific extensive areas of the golf course. CIP: Please consider creating a sustainability working group, including the greenkeeper, members of the committee and club members. CIP: Please try to connect with local environmental groups and involve them in your sustainable initiatives.		
C2 Golfers & Employees						
C2.1 Imp and welli	rove health being	C2.1.1 Benefits to human physical and mental health from golf and facility activities		The club encourages participation in activities by providing bikes for going to the nearby driving range. Club members are actively involved in promoting biodiversity on the site with their ideas. This has resulted in wild bee boxes, breeding facilities for water birds (Entenhaus) or sponsorships for trees.		

C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	There is a well-balanced representation and active participation of both male and female members.
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working conditions and professional development	Follow all relevant national legislation and best practice for employment, health & safety etc	All employees are provided with written contracts adhering to high standards and fair working conditions. Internal professional development opportunities are available for employees. The aim is to foster a polite and constructive dialogue with the employees.
C3 Communications			
C3.1 Engage golfers and members	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Provide information on the facility's sustainability commitments, actions, or achievements	The Club speaks regularly about the general nature values in local print magazines, social media or publications on their webpage.
			The club actively promotes golf around Engelberg with advertising.
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider	Provide evidence of external communications and community engagement	The golf club is deeply embedded in the local community, prioritizing local suppliers.
	community		CIP: Please try to connect with local nature groups so that nature conservation measures on and around the golf course can be optimally coordinated.
			CIP: Please describe your sustainable actions (wild bees, deadwood pile, reading rock pile, etc.) on the golf course with, for example, infographics.

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