GEO Certified®

GEO Certified® Report
Golf Küssnacht

Prepared by independent verifier Ludwig Glöcklhofer

Certified by GEO Foundation: 2024
Recertification due: 2027

GEO Foundation
Sustainability in and through golf

“Golf Küssnacht has made impressive progress in promoting biodiversity and sustainable management, with detailed mapping of flora and fauna, successful implementation of numerous habitat projects, and close collaboration with environmental experts. Native species are consistently used, and maintenance practices are thoughtfully aligned with ecological goals.

The club is well-positioned to further strengthen its efforts through the development of targeted biodiversity plans, expansion of naturalized areas, and enhanced monitoring of ecological zones.

Continued innovation in turf management and infrastructure improvements offer excellent opportunities to build on the strong foundation already in place.”

Ludwig Glöcklhofer
(GEO accredited independent verifier)

Introduction

GEO Foundation is pleased to confirm that Golf Küssnacht 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.

Golf Küssnacht 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) set for the future and Critical CIP's (CCIPs) to be reviewed at recertification, Golf Küssnacht should be awarded GEO Certified® status.

For the certification period stated above, Golf Küssnacht 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
Director, Certification and Credibility,
GEO Certification Ltd.

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
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• 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**	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	Golfcourse Küssnacht am Rigi is set in a picturesque landscape at the foot of Mount Rigi, creating a unique habitat for a diverse range of flora and fauna. Surrounded by lush meadows, mature trees and rolling hills. The area supports various plant and animal species. Located at around 440 meters above sea level, the temperate climate fosters alpine and temperate plants, including wildflowers and grasses typical of the Swiss pre-alpine zone. The golf club possesses detailed maps, along with an inventory of the flora and fauna present in the various habitats and vegetation types on the premises.
	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	The club cooperates closely with local authorities and several environmental NGO´s for monitoring the flora and fauna, as well as the potential of their habitats. There are no known legal designations on the property. There are rare and endangered species on the site. **CCIP: Please create a fauna biodiversity management plan for terrestrial and aquatic habitats, especially those that host rare and endangered species**
	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 management regularly assesses which intensively managed areas can be reduced. **CCIP: Please explore the use of GPS tracking to monitor players' movements and identify additional areas suitable for naturalization.**

			CIP: Please discuss the potential for transforming intensive turf areas that are not part of the golf playing elements into extensive areas (e.g., turf areas around and near the parking lot, clubhouse etc.).
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. Numerous projects (both aquatic and terrestrial) and conservation measures have been implemented on the golf course to promote biodiversity in extensively managed areas. **Highlight: There are several habitat and microhabitat projects on the site, such as stone walls, piles of deadwood, stone piles, wild bee habitats, bird boxes, and bat boxes.** **CIP: The transition zone from the forest to the meadow should be designed with more gradation. Graded forest edges with shrubs exhibit high biodiversity and provide refuge for invertebrates during the year.** **CIP: Create microstructures in the aquatic habitats to promote amphibians and the present, endangered, freshwater crayfish (astacus astacus).**
N1.4 Conserve key species	**N1.4.1 Practical conservation measures for priority species**		There is an inventory list with a map of terrestrial flora and fauna found in the extensive areas. **CIP: Please create a list and management plan for priority species of flora and fauna (both aquatic and terrestrial). Rare species occurring in the area can thus be specifically supported. Try to involve an external specialist or a local nature group in the implementation of these actions.**
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 regularly collaborates with suppliers and experts to exchange knowledge. In the turf nursery, ongoing experiments with various Agrostis species are conducted to identify those most suitable for the course's environmental conditions. This continuous exchange of scientific insights aims to select and establish optimal cool-season grasses, thereby enhancing the ecological conditions for the existing grass populations.

		N2.1.2 Practices to maintain good soil structure and condition		The Headgreenkeeper employs best practices for mechanical soil treatment. During the season, hollow tines and needles 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 monthly.
		N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	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. Headgreenkeeper has a fully documented fertilization plan. **CIP: Please discuss reducing nutrient input in the rough areas to promote biodiversity.** **CIP: Introduce organic fertilizers in intensive turf areas to sustainably enhance microbial activity in the rhizosphere, thereby improving the health and resilience of turfgrass.**
	N2.2 Prioritise mechanical maintenance	**N2.2.1 Non-chemical pest, disease and weed management**	Sharpen mowing blades; Remove surface moisture; Hand weeding	The mower blades are regularly maintained and sharpened. Surface moisture is removed by hand. During the main season, the greens are maintained at a minimum mowing height of 3.6 mm. **CIP: Please try to increase the mowing height on the greens to prevent stress caused by fungal pathogens.**
	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 course is inspected daily for early signs of pests and diseases. Dollar spot (Sclerotinia homoeocarpa) is the most challenging fungal disease. **CIP: To decrease the number of the synthetic fungicide applications, please develop a maintenance plan focused on the natural enhancement of the rhizobiome of turfgrasses.**
		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 approved for use in Switzerland are utilized in greenkeeping practices. Two staff members hold valid licenses for the application of synthetic pesticides. The cab-equipped field sprayer complies with all regulatory requirements set forth by Swiss law. Applicators are regularly tested and calibrated. All protective equipment, including the field sprayer, is maintained in accordance with Swiss legal standards. Excess spray liquid is properly applied to intensively maintained lawns.

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 response plan is in place and prominently displayed in multiple locations. Mowing buffer zones around water bodies and all ecologically sensitive areas are established but vary in size. Mowing buffer zones have been established around ecologically sensitive areas. **CCIP: Please develop a map that clearly defines buffer zones (minimum 3 meters) surrounding ecologically sensitive areas, in accordance with the safety perimeters mandated by Swiss regulations for wetlands and natural areas.** **CIP: Please consider performing chemical analyses of water from water hazards and wetland biotopes.** **CIP: Please conduct an audit on cost-saving measures that benefit the environment (e.g., water colorants in water hazards with rare species).**
	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	Hazardous materials in the clubhouse are stored in accordance with Swiss law, using anti-spill basins and lockable storage. Wastewater discharge licence is present. A license for the disposal of hazardous waste is in place, in accordance with Swiss law.
	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. New machinery storage with a washing bay is in the planning phase and will be completed in the near future. **CCIP: Confirm by the next certification whether the diesel and gasoline tank system complies with the current legal standards.**

			CCIP: Wherever necessary, install anti-spill containers to ensure that all gases, oils and operating materials are stored safely and in accordance with legal standards.
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. First aid and emergency response procedures are at hand An emergency wash station is available. The field sprayer filling area at the time of the onsite audit no longer met legal requirements and needed to be adjusted to comply with Swiss regulations. This requires sprayers to be filled on a sealed, spill-proof surface to prevent pesticide contamination i.e., through a covered area, catch basin, or mobile filling station. Following the onsite audit, the filling of the sprayer was switched to the fertilizer storage area, which is roofed, has a sealed and level floor, and no drainage system. In the event of a spill, no liquid can therefore enter a drain or the street. **CCIP: Please ensure that any areas where sprayers are filled continue to comply with Swiss regulations and meet legal requirements.**
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. The machinery washing bay meets Swiss regulatory standards and is equipped with an oil separator and a clipping filter.

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 (Green, Tee, Fairway, Semirough, Rough with drought-tolerant grasses are irrigated. The headgreenkeeper only irrigates when is necessary, based on his experience. The irrigation system has an automatic shut-off if it's raining.
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; Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	The automized irrigation system is regularly maintained. The sprinklers are adjusted and set to the target areas in terms of intensity. Irrigation System has automatic shut down if it´s raining. **CIP: Please discuss the introduction of a soil moisture sensor to ensure optimal moisture levels in the rhizosphere and to make water usage as efficient as possible.**
	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	Confirm the club regularly checks the water bill and monitors consumption. In the sanitary area, predominantly water-saving toilet flushes are installed. There are drinking water fountains at several locations on the premises. To save drinking water, greywater is used at the washing station for golf equipment.
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 utilizes its own on-site water source located at the perimeter of the property to supply the clubhouse and support irrigation needs. **CIP: Please explore opportunities for harvesting rainwater for golf course irrigation. This represents a sustainable approach to managing intensively maintained turf areas, both ecologically and economically, over the long term.**
R2 Energy			
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.

				CCIP: Please explore the use GPS tracking to identify areas with low usage for potential sustainable repurposing (as per N1.2.1 above). **CIP: Please consider forming a sustainable working group to reduce energy consumption and enhance biodiversity. An external consultant or local nature group could also 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. There are electric charging stations for cars in the parking lot.
	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 photovoltaic system on the clubhouse is being continuously expanded and is currently in the first of three phases. The final goal is to equip all roofs suitable for photovoltaic installation with solar modules.
	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	The waste management bill is regularly reviewed. The club collaborates with a local waste management facility to ensure proper recycling, with all waste being stored in compliance with regulations. Organic waste, including clippings from the clubhouse and golf course, is directed to a nearby composting facility. Additionally, aerification cores 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 prioritizes local products and production. The clubhouse kitchen sources its ingredients from nearby suppliers. Honey is produced on-site. Material transport, such as sand delivery, is managed by a local transportation company.

				CIP: Please discuss the possibility of using environmentally friendly cleaning products, including soap for the restrooms and facility cleaning supplies.
	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	There is no waste separation around the clubhouse or on the golf course. The staff separate the waste manually afterwards. **CCIP: Please explore opportunities of waste separation directly on the golf course and clubhouse (e.g., clearly labelled bins for each waste stream).**
	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-functionality	**C1.1.1 Social and recreational activities at the facility**		Public hiking trails encircle the golf course. The restaurant is open to the public and welcomes all visitors. The clubhouse offers seminar rooms available for public rental. During the off-season, the golf course is accessible to everyone (Pay and Play).
C1.2 Provide for volunteering and charity	**C1.2.1 Opportunities available for volunteering and support of charities and good causes**		The club hosts several charity events each year. The earnings are donated to a charitable foundation. The golf club is closely connected to the local community and is present at local festive activities.

			Newly interested children and adolescents have the opportunity to participate in a training session twice for free. Employees are also allowed to play golf free of charge.
C1.3 Establish active community partnerships	**C1.3.1 Positive and constructive engagement with neighbours, the local community and other groups**	Create a 'sustainability working group'	A strong partnership with local farmers helps maintain specific extensive areas on the golf course. **CCIP: Please explore the feasibility of forming a sustainability working group that includes the greenkeeper, committee members, and club members. An external consultant or local nature group could also be engaged to facilitate the identification of potential opportunities (as per R2.1.1 above).** **CIP: Please explore the feasibility of engaging with local environmental organizations. Consider inviting them to collaborate on your sustainability efforts.** **CIP: Please explore measures to ensure that information about environmental measures is effectively communicated to the general public through appropriate channels such as print media, bulletin boards, or social media.**
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 offers nature excursions open to everybody. Additionally, there are few infographics for hikers about the habitats found on the site. **CIP: Please try to ensure that infographics are easily available and accessible to golfers as well as hikers.**
C2.2 Be open and inclusive	**C2.2.1 Inclusivity and diversity in membership and visitor policies**	Demonstrate inclusive policies for members and visitors	A well-balanced representation and active participation of both male and female members are encouraged. The golf course is open to everyone who is familiar with golf etiquette (pay and play).
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.
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 the newsletter for club members. **CIP: Please discuss the benefits of providing general information about nature values to all visitors of the golf course.** **CIP: Please consider offering sponsorship opportunities for members to support microhabitats, extensive meadows, tree planting, or other ecological initiatives.**
	C3.2 Celebrate and promote sustainability	**C3.2.1 Activities that raise awareness and engage people in the wider community**	Provide evidence of external communications and community engagement	The golf club is well integrated into the local community. **CCIP: Please explore measures to communicate your sustainability initiatives and actions on the course —such as wild bee habitats, deadwood piles, rock piles, aquatic ecosystems and sustainable greenkeeping—using informative materials like infographics.** **CIP: Please try to establish connections with local nature conservation groups to ensure that environmental protection measures on and around the golf course are effectively coordinated.**

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