GEO Certified®

GEO Certified® Report
Hirsala Golf

Prepared by Independent Verifier, Sanni Sjöblom

Certified by GEO Foundation: January 2021

Valid until: January 2024

GEO Foundation
Sustainability in and through golf

“Hirsala Golf Club has been active on sustainability for many years and the consistent progress is clear to see. The club is now at a very good level to act as a focal point for golf clubs in Finland. The club continues to find new activities and projects to improve, which is testament to its excellent people and inspirational philosophy.”

Sanni Sjöblom

GEO accredited Independent Verifier

Introduction

GEO Foundation is pleased to confirm that Hirsala Golf 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.

Hirsala Golf 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, Hirsala Golf should be awarded GEO Certified® status.

For the certification period stated above, Hirsala Golf 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

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**

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	This is Hirsala's fourth GEO certification. Sustainability is very well established throughout the club. Over the years there have been many projects to improve the landscape.

				They have been for example fish trail project, nature survey and developing biodiversity. Once a year a work group sets yearly goals for environmental issues at the course. CIP -Bird survey and mapping ideas to improve birdlife along the course. -Increasing areas of meadows
		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	One protected grove. Flying squirrels nest on the course. Old trees and forest areas are protected by the golf club.
		N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	Old stone footings of building ruins are identified and left standing, although they are not officially protected.
	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	There have been significant projects to increase areas of meadows. Last year areas for meadows were doubled and further opportunities are identified. CIP Provide flora for pollinators by introducing wildflowers
	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	Native species are favoured, woodland and grassland management very well informed. Fallen trees are left in the woods to provide areas of microhabitats.
	N1.4 Conserve key species	**N1.4.1 Practical conservation measures for priority species**		Flying routes of squirrels are identified andprotected. Dead trees are left standing for insects and woodpeckers. The buffer zones around water bodies are left untouched. Fish trail was built in co-operation with K-Kalapolku, Virho and WWF. Companies like Rudus Oy and Cramo Oy sponsored the project. Spawning places and ladders are built for the fish, as well as decaying trees are left for invertebrates.

			During the autumn season, 5 EUR of green fees is given to WWF to protect the Baltic Sea. CIP 1. Learn about beehives, possibly in co-operation with a local beekeeper. 2. Wider bird survey that could be used as a quide for other local courses
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	Greens are on Agrostis stolonifera and the other parts 50:50 Poa pratensis + festuca spp. The goal is to have the best greens in Finland. Poa annua which is not desirable, is controlled mechanically. Festuca is favored in roughs since it requires only little irrigation. It also brings browner look to roughs which is now part of the look of the course.
	N2.1.2 Practices to maintain good soil structure and condition		The soil structure is designed to follow USGA quidelines. Extensive drainage is utilised. Thatch layer has had a large effect. It has been too thick, but it is getting better thanks to management approach. The improvements are done by aerating and decreasing the fertilizers use. The use of fertilizers is cut in half over the last three years.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Soil testing is carried out twice a year, spring and autumn. Irrigation water is known to increase the soil pH, so management takes this into account with fertilization. Reports are confirmed.
N2.2 Prioritise mechanical maintenance	**N2.2.1 Non-chemical pest, disease and weed management**	Sharpen mowing blades; Remove surface moisture; Hand weeding	Thatch control, aeration and moisture removal are the most important in non-chemical disease management. Blades are sharpened in regular basis. Poa annua is picked manually.

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	Fungicides for greens only. Herbicide on the fairways every 2 years, combats clover, dandelion, holistic spraying, and every second year as needed by spot spraying. Buffer zones present. Mechanical treatment is always undertaken and when spraying, timing factors always taken into account.
	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 registered and approved products are used. Active ingredients are alternated every 3-4 years to avoid resistance. The pH is cut down with manganese. This will decrease diseases and mold. Compost tea program is designed to improve soil microbial activity, which supports the natural pathogen prevention. All the personnel working with chemicals are educated and certified regularly. Sprayers are tested every 5 years and calibrated before every spray.
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.	In case of leakage from machinery, the guideline is to drive the machine on the rough or on a road where then soil is treated. Fire regulations are followed. Leftovers that are not sprayable, are sorted and handled as hazardous waste. Leakages are prevented in regular maintenance. Buffer zones around the waterbodies and woods is 5 m.
	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	Machinery hall is cold storage with impermeable concrete flooring and air conditioning. The plant protection substances are stored safely in the same storage hall. Maintenance hall is heated. Sprayers are also stored there.

				Waste contractor is a licensed company Lassila & Tikanoja. Batteries and electronic waste self-collected and delivered to a contractor. Waste oil is collected in 1000 litre container that is emptied by a licensed contractor every 1-2 years. Emptying is done when the container is half full. CIP -Fuel consumption will be collected for each machine -Moving towards use of electronic robots in mowing. That will cut down use of consumption fuels, waste oil production and working hours.
		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	Washing area has oil separation wells, that are emptied every 1 year. Clippings are composted. Liquid phase pesticides are mixed in a bucket at the washing area. The empty containers and nozzles are rinsed. Rinsings are sprayed along the fairways. CIP There will be survey on efficiency and costs of using willow in water purification at the washing area, as well as on recycling of washing water.
	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	Hazardous substances are stored in proper room with impermeable flooring where leakages can't take place, and air conditiong. The door of this storage is kept locked Absorbing garments are in use and are managed by a contractor (Lindsrtröm Oy). There is a first aid materials and devices in every working space. Defibrillator is with the caddymaster. First aid training is held every three years and it is designed for the personnel of a golf club specifically.
	N3.3 Responsibly manage waste / storm water	**N3.3.1 Appropriate wastewater usage and discharge licences**	Wastewater discharge licence;	Wastewater pumping station is renovated recently. The wastewater is then led to the municipal system. Separation wells are emptied once a year at the restaurant and twice a year elsewhere.

			Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	CIP Learn about the willow water treatment unit

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	Most of the water used for irrigation is from a pond that is on the course. The waterbody is basically natural drainage retention from the golf course area. There is a pipeline from the Finträsk drain. This water is needed only a little Humidifiers / wetting agents reduce the need to use water. CIP Exploring the development of waterway irrigation.
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	Moisture meter is manually used. Irrigation is based on the use of manual soil moisture meter and visual observation. The whole substrate is irrigated thoroughly to maintain good rooting depth. Manual irrigation used at hotspots. Irrigation software is from 'Bylone' and it is sufficient. Irrigation hardware is constantly maintained by an educated staff. Greens are currently under construction. Most of the time faults in irrigation system are found out if there are issues with growth of the grass. CIP Moisture sensors and thermometers will be improved

	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	Water consumption is constantly monitored through the irrigation system and the water content in the pond. The water used in the clubhouse and maintenance is mains potable. New owner at the restaurant has a contract where environmental issues are taken in account. The use of electricity and water in the restaurant is separately billed. CIP Flowmeters are to be installed behind the pumps at the irrigation pond.
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	Water in the irrigation pond can be freely used. There is a limit to use the water in the Finträsk drain.
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 areas of meadows and roughs are increased to cut down the need for intensive management. The seeds used are chosen to be more suitable to the local environment. The use of growth regulators has decreased the need of cutting and mowing. CIP Lawnmowers will become robotic that are charged with solar panels. To change to Mydiesel by Neste that is diesel made of waste.
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 clubhouse and maintenance hall has Optiwatti system that lead to large savings in energy use last year. The spaces not in use are kept cold or at minimal heating. The solar panels for the clubhouse are in acquisition. The clubhouse is quite large and therefore it plays a large part in the energy consumption of the club in total. There is an air-to-air heat pump in the office. CIP Lighting is to be coverted to LED

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	Currently 10 % is green energy CIP Robot mowers that utilize solar energy Solar energy panels There are bids for solar energy installations for the clubhouse.
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 fertilizers are bought in large containers. The deliveries are planned carefully so that as much as possible can be delivered at once. Organic content is recycled. Sign-posts are of recycled plastic. Machinery and devices are sold to be reused. When everything is well planned, it is easy to make large orders ahead and the club is good at this. Sand and soils that are brought in are from close by. Sand for the greens is always delivered from far away as it has a specific requirement for particle size distribution.
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	Restaurant keeper has a contact that entitles the use of local products and vegan options.
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	Collection of plastic waste has begun last year alongside other materials separation that took place already before. The restaurant has its own waste collection. The biowaste from the maintenance hall is composted and recycled. The course has one waste collection point, where all the waste from the golfers is collected and then separated. CIP

				There will be materials separation on the course. All the bins will be removed. Education of golfers on waste collection issues.
	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	Licensed contractors are bid every year. CIP Deep waste collection bins will be increased when the emptying can take place less often.

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**		During the off season the course has many uses for outdoor activities such as walking and hunting. During the winter there are skiing tracks. Clubhouse is open for all. There is a gym at the club house.
C1.2 Provide for volunteering and charity	**C1.2.1 Opportunities available for volunteering and support of charities and good causes**		There are many charities organizing events at the golf course. There are for example Kummit golf - lastenklinikoiden kummit (Charity for children's hospitals) Women's bank Low-income people are offered a free Christmas lunch at the restaurant. Helping other golf courses, eg. At tournaments.
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'	Member of a local hunting association as hunting is allowed along the course during the off season. Building the fish trail on the neighbour's lands

			Occasional co-operation with local schools, eg biology lessons, sports lessons, economy lessons. Students can come for trainings.
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 has participated in the projects of Finnish Golf Association related to human physical and mental health. The course is mostly walkable. CIP Informing about the values of walking and physical activity
C2.2 Be open and inclusive	**C2.2.1 Inclusivity and diversity in membership and visitor policies**	Demonstrate inclusive policies for members and visitors	The Hirsala Golf Club is operating based on traditional memeberships. It is an open course, where everyone can 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	Working conditions are good. There are three permanent employees. During the summer local youth is often recruited by the caddymaster. Staff are introduced to their work with an introductory materials. The introduction is task specific. Safety precautions are part of the introduction. There is book-keeping on incidents and close by incidents. There is a risk analysis done for the employees and for the players separately.
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	Web page, social media, emailing the members. CIP Informative signs about meadows, nature trails etc. will be installed.

	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	Ecological aspects are highlighted in the operations of Hirsala Golf. It is visible in internet pages and in all the signage. Environmental issues are discussed in newsletters. Carbon footprint is calculated through GEO. Having good relations with stake holders is important. There is co-operation with WWF, local community, the university and Birdlife. CIP More information to be given out about the environmental issues. The co-operation with local operatives such as schools will be developed even further.

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