



GEO Certified[®]

GEO Certified[®] Report **Sarfvik Golf**

Prepared by Independent Verifier, Sannimaria Sjöblom

Certified by GEO Foundation: April 2021

Valid until: April 2024

GEO Certified[®]

The logo features a green circular icon with a white golf ball inside. To the right of the icon, the text 'GEO Foundation' is written in green, with 'GEO' on the top line and 'Foundation' on the bottom line. Below this, the tagline 'Sustainability in and through golf' is written in a smaller green font.

**GEO
Foundation**
Sustainability in and through golf

“Sarfvik Golf is a facility with a well-structured management and it performs as such. Years of experience and regular continual improvements have added up. Since my last visit in 2017, the club has shown a number of developments. The turf management is very well informed and the use of chemicals is certainly at the minimum level with current technology. The next great leap for Sarfvik Golf will be to entirely switch to hybrid and electric vehicles, and also consider how it can multiply its sustainability message throughout the community and even wider.”

Sannimaria Sjöblom

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Sarfvik 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.

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

For the certification period stated above, Sarfvik 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



Verifier's Report

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

THEMES	ACTION AREAS
Nature	<ul style="list-style-type: none"> • Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	<ul style="list-style-type: none"> • Water • Energy • Materials
Community	<ul style="list-style-type: none"> • Partnerships & 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	To measure and map the area, Google Earth is used. Environmental audit and plan from 2016. It includes many long-term plans that have been underway towards 2021. One of them

			<p>has been to change the tree species to more local, and therefore suitable species. Also, trees that support insect life have been chosen. Monitoring of the success of the process is ongoing.</p> <p>There is a large unmaintained area with significant nature value.</p> <p>The old course is more fertile, leafy, and has some spruce woodland and walnut groves.</p> <p>The new course is rocky, with pines and heather. It ends to the shore of a lake.</p> <p>There is a plan to renovate the old course with significant naturalisation opportunity.</p>
	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	<ul style="list-style-type: none"> -Designated areas for flying squirrels -Certain trees are protected -Bird survey is done -Mushroom and insect species are monitored <p>CIP: Encourage members to monitor surrounding nature and different species.</p>
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	<p>There are military bunkers from the Soviet Union period. Some are still whole. There are also locations where there are some remains of trenches, that are marked by the national board of museums and history. Some historical places are marked by a signpost.</p> <p>CIP: Renovation and restoration of one military bunker and expand educational opportunities</p>
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 course is quite narrow. There is mapping of unmaintained areas. Along the old course flowery meadows are planted and their area will be increased.
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	<ul style="list-style-type: none"> -Designated area for flying squirrel -Choice of trees according to the plan

			<p>-Hard woods that are long living are favoured and liked by pollinators.</p> <p>-Invertebrates are monitored.</p>
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		<p>-Flying squirrels</p> <p>-Walnut groves</p> <p>-Junipers</p> <p>-Iris along the waterbodies</p>
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	<p>Festuca is favored as it deals better with periods of drought.</p> <p>Poa present on the fairways.</p> <p>Agrostis canina and Agrostis stolonifera last low cut and are favored on greens.</p> <p>Ongoing work to improve the turf.</p> <p>There is cultivation of 1000m2 patch Agrostis stolonifera and Festuca rubra that is used if some turf needs to be fixed.</p>
	N2.1.2 Practices to maintain good soil structure and condition		Aeration, sanding, and liming to regulate soil pH on a regular basis
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	<p>-Mostly long-acting, granular fertilizers as needed.</p> <p>-Bookkeeping of fertilizers is done.</p> <p>-Sprayed only low volumes at once</p>
N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	<p>Turf management is mostly mechanical with chemical intervention only to support the mechanical work.</p> <p>Growth adjustment chemicals (herbicides) are used to decrease the need of cutting.</p>

			<p>Blades sharpened on a regular basis.</p> <p>Dew is removed from greens and fairways especially at the end of the season.</p> <p>Manual weeding is used</p>
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	<p>Establish patterns and levels of risk for pests and diseases;</p> <p>Scout the course daily for early signs of pests and disease;</p> <p>Accurate pest and disease identification;</p> <p>Map and track pest and disease hotspots;</p> <p>Establish pest and disease thresholds</p>	<p>Chemicals are used only when necessary (curative approach).</p> <p>Diseases and weeds must be visible before any action to remove them takes place.</p> <p>From experience, the hot spots where diseases can be anticipated are well known.</p> <p>Constant visual monitoring.</p> <p>Specific pesticides are used for the relevant problem</p>
	N2.3.2 Application of chemicals with full safety precautions	<p>Use only legally registered and approved products;</p> <p>Ensure staff are fully qualified and licenced to use pesticides;</p> <p>Regularly calibrate and test applicators;</p> <p>Use appropriate protective equipment;</p> <p>Dilute and dispose of leftover product on untreated areas of turf</p>	<p>Chemical / product log is confirmed.</p> <p>Applicator licenses are confirmed.</p> <p>Spraying and protective equipment are up to date.</p> <p>There is very little left over from sprayings. It is diluted and sprayed appropriately on the turf range, which usually is not sprayed.</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>Document procedures for emergency spill responses;</p> <p>Maintain mowing buffer zones around water and all ecologically sensitive areas;</p> <p>Maintain spraying and spreading buffer zones around water and all ecologically sensitive areas;</p>	<p>There is a plan for spills from the machinery.</p> <p>Machinery is maintained and renewed in regular basis.</p> <p>Buffer zones are minimum of 5 m.</p> <p>Water samples from lake Fintrask are taken in co-operation with Finträsk protection union.</p> <p>Samples of in- and outflow waters are taken occasionally.</p>

		Create a map / aerial visual reproduction, drawing etc of the course showing buffer zones and no-spray, no-spread areas.	CIP: -Accurate mapping of non-spray areas. -More regular water sampling
	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	-Waste collection is area well organised -Municipal wastewater system in operation
	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 is asphalted with containment wells. Indoor washing area is of impermeable concrete. Fertilizers are loaded in front of the maintenance hall on asphalt. Containers and sprayers are washed with water and sprayed on the course / range. Storages are up to standard. Hazardous wastes collected by a licensed contractor; Those are mostly motor oils and filters. Wastewater from washing area goes to sand separation well and oil separation wells. Outdoor washing area is used for rinsing. Indoor washing area is used when proper washing is needed. Grass clippings from machinery is rinsed at the peripheries of the course and composted.
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;	Storage tanks are up to standards and inspected on a regular basis. Spacious, modern storages is well kept.

		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	Oil filters are collected in their own container. Pesticides are stored in their own closet with impermeable flooring Spill containment kits are present and have their own disposal. Fire extinguishers are checked. First aid education is provided.
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)	Sarfvik Golf belongs to the municipal wastewater system which is permitted in the building licenses.

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	Irrigation system is recently updated. Sector irrigation system has replaced the circular ones. The software is Rainbird.
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	Soil moisture sensor along with visual monitoring. Constant maintenance of irrigation system. Nozzles changed always when needed. Specific personnel are responsible for irrigation system management. There is a weather station that collects the data and the irrigation is based on the soil moisture levels.

	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	The showers and toilets are modern and low consuming. The water usage is monitored. All the equipment is maintained in case of leakages.
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	In some watering-in with fertilizers, pond water is used.
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	Growth adjusting substances (herbicide) reduce the frequency of mowing. The machinery is maintained and renewed to make it more efficient. Electrical machinery is favoured when renewing fleet.
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	Clubhouse has LED lighting and air heaters. Outdoor lights are also LED. There is distance heating at the maintenance hall. An energy audit has been done at the clubhouse and it includes a plan to improve its energy efficiency further.
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	All the electricity is purchased on a 'green' contract.
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	Products are bought in large packages to reduce delivery mileage.
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	<p>Certified vendors are always used.</p> <p>Local meat is used in the restaurant.</p> <p>CIP: When the clothing of the staff is renewed, only ethical and environmentally friendly materials are used (such as recycled plastics, and organic cotton).</p>
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	<p>Wastes are separated - cardboard, biowastes, bottles,</p> <p>Cardboard is baled with a machine that decreases the need of cardboard collection to 2 times a year. Cardboard is then recycled.</p>
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	Confirmed

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		Sarfvik Golf is the only private club in Finland. There is access to the woodlands along the course. People can come and pick berries and mushrooms and watch birds in the woods according to the Finnish 'every man's law'. During the winter, there are skiing tracks on the course.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		Sarfvik Golf participates in the Lake Sarfvik protection union and in road maintenance union. There have been charity events held, eg. for the Women's Bank.
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'	There is good co-operation with the neighbors in environmental issues.

C2 Golfers & Employees

C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		During the winter the course is used for skiing tracks. There is also a gym that is open to members. Members are mostly of an aged demographic and the club offers them chance to stay active.
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	Although the club itself is private, non-members are welcome through regular green fee bookings
C2.3 Employ fairly and safely, and provide career opportunities	C2.3.1 Ethical and legal employment, working	Follow all relevant national legislation and best practice for employment, health & safety etc	New staff are introduced to their work by experienced staff so local knowledge is

	conditions and professional development		<p>passed down efficiently.</p> <p>Both courses have their own assistant head greenkeeper under the course management structure.</p> <p>The staff is encouraged to be educated.</p>
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	<p>-Webpages -Mailing lists -Environmental issues are mostly included in course maintenance updates.</p> <p>CIP: Consider how to provide more information on sustainability activities and promote The subject more, within and outside the club</p>
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 club is proud of its environmental care and responsibilities towards nature and resource use, but there is a significant opportunity to spread this message and become known more for the number of good things it does in partnership with local authorities and government.

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