



GEO Certified[®]

GEO Certified[®] Report Mjölby Golfklubb

Prepared by independent verifier, Mårten Wallberg

Certified by GEO Foundation: December 2021
Valid until: December 2024

GEO Certified[®]



 **GEO
Foundation**
Sustainability in and through golf

“It’s impressive to visit a golf club for the third time in 8 years and see the progress in sustainability still increasing. That’s the experience of visiting Mjölby GK. The efforts in biodiversity, energy and water efficiency continues - green infrastructure project, solar panels and other renewable energy sources, new irrigation system, bee habitats and organic fertilizers, to mention a few efforts. It’s only one conclusion one can have after visiting Mjölby GK: It is a role model for sustainability work in Sweden.”

Mårten Wallberg

GEO accredited independent verifier



Introduction

GEO Foundation is pleased to confirm that **Mjölby Golfklubb** 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.

Mjölby Golfklubb 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, **Mjölby Golfklubb** should be awarded GEO Certified® status.

For the certification period stated above, **Mjölby Golfklubb** 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	The course is suited on old farmland containing meadows and grazing land and old forests. The area where the forests and grazing land is inaccessible terrain and it was bold to decide to construct a golf course there. The club has made surveys of the flora, large mammals, birds,

			batrachians and reptiles. The surveys were conducted by the local environmental NGO, the municipality and by the members themselves. The forests several large mammals like elk, fox and marten. The ponds contain the rare species crested newt and moorhen.
	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	Each year the club arrange walks on the course with a representative from the local NGO to localise changes in the environment. This self-monitoring contains checking habitats and bird nests. Habitats for amphibians and water birds are also included in the self-monitoring.
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	A historic stonewall on the course is taken good care of but apart from that, the area where the club is situated don't contains any valuable cultural heritage except for the old cottage next to the wall.
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	
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	A new wetland has been created with the support from the Government (County Board). The purpose is both cleaning water for irrigation and enhance the biodiversity. Signs are to be put up along the wetland. Some of the financing from the club for this did come from the prize money for best sustainable club 2018 in Sweden. The club is also becoming a partner of the regional work with the national goal of Green Infrastructure. This work is planned to start in spring/summer of 2022.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		<p>A thorough survey of the ponds was carried out in 2019 together with an official from the County Board. New signs of noticeable species and fauna depots have been set up during the last years. These activities are part of a project, partly sponsored by the government, concerning the ponds, which has been carried out with great success. The aim of this project is to create better habitats for amphibians, that is slopes down to the ponds and rocks and this has been done in corporation with the ecologist from the municipality. This together with signs has made the municipality proud and it is spreading this to other municipalities. New habitats, area around 600 m2 for wild bees has been created in 2020-2021 in corporation with the County Board. Signs has been put up adjacent to the area.</p> <p>Continual improvement 2021</p> <ul style="list-style-type: none"> - Do a follow up of the new habitats for the wild bees. - Do a follow up of the new wetland. - Do a follow up on project Green Infrastructure.

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	Although red fescue (<i>Festuca rubra</i> ,) and common bent (<i>Agrostis tenuis/capillaris</i>) initially were put out on the greens, fairways and tees the dominating species now is <i>Poa annua</i> . To get rid of the <i>Poa annua</i> the club would have to reconstruct all the greens, which is a will from the club. But this is not possible for the club due to the economy for the moment. One tee is reconstructed with a mix of red fescue and common bent. So, when future reconstructions are carried out this mix is used. But the club has tested some things to get healthier <i>Poa annua</i> . This is explained in part N2.2.1 below. The club has a rather detailed management plan, but the greenkeeper is always taking the reality of the day in consideration and thus often changes the plan from day to day.
	N2.1.2 Practices to maintain good soil structure and condition		Once a year an analysis of soil of the greens, tees etc is conducted. On the base of the analysis improvements are done.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	The amount of fertilizer used is around average for clubs in Sweden. The club is using P-K-plus, which contains potassium phosphite, a product that up regulates the turfs defense mechanism and Attraxor and Primo Maxx (before they used only Primo Maxx), products that reduces the growing of the grass. Since 2018 the club has tested to use TX10 from Terralift, a multi-source compact organic fertilizer containing 10 key components to soil fertility. These have been put on the course twice a year. The club also put on liquid fertilizers, which not is organic. But all in all the club uses less fertilizers than before and at the same time get better greens.
N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	The height of the <i>Poa</i> on the greens was changed from 3,2 mm to 3,7 mm during 2020-2021. This has given more stress resistance for <i>Poa</i> and thus less chemicals needed. The members are very happy, and the greens are healthier than ever. Some trees have been cut down adjacent to some greens to give more sunlight to the greens.
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 being checked ocularly daily.

	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	All employees that spread chemicals are licensed to do it all precautionary measures are carried out, and of course all according to Swedish and EU-law. Continual improvement 2021 - The club should test to increase the amount of organic fertilizer compared to inorganic fertilizer.
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.	A full-scale water quality analysis is being carried out which includes samples from inflow, on-site and outflow. This is being done twice a year. The analysis shows decreases of N and P at the outflow, which of course is great. All ponds are now harvested except for some areas due to animals. An embryo of a risk analysis was carried out during fall 2013. This analysis gave birth to the absorption cloth mentioned below. The greenkeeper has equipped the mowers with an absorbing cloth to be used during oil leakage from the mowers. The cloths are put in sawn-off pipes, which are engaged on the mowers and the method is very effective and innovative. All the mowers are since 2015 equipped with these items.
	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	Everything according to Swedish 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 hazardous materials are kept in the same room as the Waste-2-Water and of course the materials are kept in a locked storeroom, because in case of an accident the W2W is there to help taking care of the bad chemicals. The filling of diesel is also carried out in the same room as the W2W. A grease trap is used to take care of the grease coming from the restaurant. The grease is then taken care of by a slurry exhauster and fetched by a firm. The pesticide filling is carried out in the same room as the W2W. The W2W has been restored to be more efficient.

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 club is doing everything you must do according to Swedish law and is also continuously thinking about things to improve.
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)	Continual Improvement 2021 - A full-scale water quality analysis concerning chemicals should be carried out.

<h2>RESOURCES</h2>			
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	<p>The club uses a rather modest amount of water for irrigation. Each year the self-monitoring contains checking the amount of water used, checking the pump house, irrigation system and uptime.</p> <p>The water used for irrigation is mainly taken from one pond (connected to the new wetland) on the course, which get their water from a creek that runs into the course from a nearby lake. When needed, the club can get water from a nearby large river, Svartån, which has been done only once during the last 11-12 years. The municipality takes water from the same river.</p> <p>The Waste-2-Water system used by the club is an efficient way of recycling the wastewater from the washing facility. The club use single</p>

			level mixers in all wash basins.
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	A new irrigation system is on its way of being completed. The new system supports foremost greens, tees, and some fore greens but also some fairways. At the same time the club make changes in the drainage system. The whole project will cost around 2-3 million SEK and will take maximum 4 years and will mean that some fairways will have irrigation possibilities but most of them not. New pumps were installed in 2020 which gives more efficient irrigation.
	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	Waste-2-Water is used since 2006 when cleaning the machines etc. W2W is a closed system with microbes doing the job of breaking down bad things. The water is recycled to be used again.
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	Continual Improvement 2021 - Start a dialogue with the municipality concerning the club taking care of surface water and water from outside the course, especially during years with flooding.
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 has since 2019 a new contract concerning energy and it is now only renewable. The club has a thorough knowledge about the amount of energy consumed in the different parts of the facility (maintenance facilities and club house).
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 club has installed air heat pumps in the restaurant and maintenance house and small machines uses for maintenance is run with alkylate petrol, which is less harmful to the environment, cleaner on the machines and produces around 50% less emissions. The club has by itself gone through the different parts of the facility to see where it could reduce energy and fuel consumption. The motto is: "Why use energy where you don't need it." The club has lowered the price for locker boxes to make people bicycle instead of taking the car.

<p>R2.3 Source energy responsibly</p>	<p>R2.3.1 Measures to source alternative, renewable forms of energy</p>	<p>Determine potential sources of renewable energy in the area and on-site, through renewable energy providers</p>	<p>Today, 100% of the electricity is renewable and the level of consumption has decreased the last years and is now down to about 200,000 kWh per year, which is somewhat low. Even though the consumption has gone up in small amounts, the consumption in the clubhouse has gone down due to measures. Solar panels were installed 2020 with sponsoring from Östergötlands Sports Association. The solar panels produced around 24,000 kw/h the first year and the club sold 4,400 kw/h. An energy audit has been conducted and measures have been done according to that. However, the maintenance facility remains. The club is now involved in a study for using automatic mowers driven by solar energy via batteries.</p> <p>Continual Improvement 2021</p> <ul style="list-style-type: none"> - Do measures in the maintenance facility according to the energy audit. - Go further with the automatic mowers driven by solar energy via batteries.
<p>R3 Materials</p>			
<p>R3.1 Reduce materials demand</p>	<p>R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives</p>	<p>Undertake a review of materials consumed</p>	<p>Each year the self-monitoring of the supply chains contains consumption of fertilizers and pesticides. Other domains that are monitored are follow-up of products used and the amounts of waste. The club is generally very strict in using the decisions made about what to do in a good way. A large amount of the suppliers is within 10 kilometers from the club, which is a very good thing. The only domain that has all the suppliers outside the range of 10 kilometer is the course supplier.</p> <p>A large amount of sand has been purchased for the new irrigation system.</p>
<p>R3.2 Purchase responsibly</p>	<p>R3.2.1 Practical use of an ethical / environmental purchasing policy</p>	<p>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>	<p>The club has a thorough purchasing policy, which contains regulations about ethics, environment and moral. The policy is used mainly when large purchases are being made, for example when the club is about to buy new furniture. At this example the club makes sure that the wood is certified by FSC.</p>
<p>R3.3 Reuse and recycle</p>	<p>R3.3.1 Waste stream separation for maximum recycling and re-use opportunity</p>	<p>Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled</p>	<p>The club has installed a recycling system in the restaurant, which is working very well. All in all, the club has a thorough system for reuse and recycling, and it is continuously refining it, for example with recycling centers around the course and the club house and the</p>

			introduction of the “green bag”, a way of collecting organic material to convert it to biogas, which works better and better. The waste that goes to recycling is taken care of by a company.
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	See R3.3.1

COMMUNITY			
C1 Outreach			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Diversify access and provide multi-functionality	C1.1.1 Social and recreational activities at the facility		The nature trail, which was in the planning stage in 2014, has now been realised with the co-funding from the County Board. It’s a great little trail, going up and down in the hilly landscape just beside the course and contains very pedagogical and informative signs about the surrounding nature. Since the opening amongst others kindergarten classes has walked the trail, which just superb.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		Competitions and activities are conducted yearly to support research in child cancer.

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'	The club has been awarded The Club of the Year in Östergötland County, much because of their sustainability work and their relations with the community. An article in the regional newspaper was published because of this occasion. The club has a very good relationship with the Count Board and the municipality. The latter initiated the self-monitoring program.
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	<p>The sustainability working group is fully integrated in the club's management and people part from the local community and the environmental NGO in the municipality are in close collaboration with the group.</p> <p>The sustainability work is an essential part of the new operation system for the club that has being created. A self-monitoring system gives the club a clear view of the sustainability work. Part of the self-monitoring system has been going on since 2006 (Waste-2-Water, pesticides, hazardous material etc.) and the rest was started in 2014. The club takes the national environmental goals in consideration during the management, especially those about water, emission, and nature.</p> <p>The computer system at the club is used in a very good way to document what's being done on the facility, not at least the sustainability work.</p>
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	Confirmed
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 sustainability group is a part of the website, and the club has a monthly newsletter with information about the sustainability work and the course guide contains information about the sustainability work.

<p>C3.2 Celebrate and promote sustainability</p>	<p>C3.2.1 Activities that raise awareness and engage people in the wider community</p>	<p>Provide evidence of external communications and community engagement</p>	<p>Schools are often visiting the club, both by invitations from the club and uncompelled. The club finds this collaboration very yielding.</p> <p>Continual Improvement 2021</p> <ul style="list-style-type: none"> - Include the new wetland as part of the nature trail. - The club should set up a structured education plan for the employed concerning the sustainability work. - A more formal co-opt with the representative from the municipality and the local NGO is worth a try. That is, that they are present at the meetings with the sustainable group without having a right to vote
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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