



GEO Certified®

GEO Certified® Report Golfclub Heelsum

Prepared by independent verifier Guido Hamelink

Certified by GEO Foundation: 2025
Recertification due: 2030

“Golfclub Heelsum is taking major steps toward a green future. With 128 solar panels on the roof, plans for 3 hectares of new nature on a former maize field, and a sustainability committee that anchors policy, the club is building a future-proof organization that cares for the landscape. The coming years will focus on further strengthening biodiversity and striving for greater self-sufficiency in water and energy.

*Guido Hamelink
(GEO accredited independent verifier)*



Introduction

GEO Foundation is pleased to confirm that Golfclub Heelsum has successfully achieved GEO Certified® status for its outstanding work to foster nature, conserve resources and support the community.

GEO Certified® is the most respected certification for golf, based on a credibly and transparently developed modern sustainability Standard of best practice.

Golfclub Heelsum 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, Golfclub Heelsum should be awarded GEO Certified® status.

For the certification period stated above, Golfclub Heelsum 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 – 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.isealliance.org



Verifier's Report

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	General knowledge of the wildlife and habitats on the site	From the start, the design has responded very well to the landscape values (meltwater fan with dry valleys from the last Ice Age) and ecological potentials (heathland and open sand); three landscape zones, each with its own target image: sandr (open sand in dry valleys), helsum (heath, Scots pines), airborne (grassy, park-like). Landscape openness has been carefully respected (e.g., semi-underground shelters). The vision for the landscape now seems to be shifting at the golf club. The golf course is about 25 years old and is entering a new phase as trees and other vegetation gain more volume. I note that the vision among different stakeholders is not aligned. CIP: Please redevelop the landscape vision and establish it jointly, so that decisions about management and design can be made within a clear framework.
	N1.1.2 Knowledge of legal designations for protected areas, habitats and species	Identify rare, protected or endangered species found on the golf course; Understand legal responsibilities for landscape protection and special area designations, if applicable	Trees and shrubs: Scots pine, pedunculate oak, birch, juniper, gorse, broom Hedges planted for insects and birds (2023): hawthorn, spindle, serviceberry, alder buckthorn, dog rose > 300 plant species: wild carrot, yellow rattle, broad-leaved helleborine, great mullein, creeping broom, maiden pink 57 breeding bird species: stonechat, partridge, kestrel Mammals: badger, rabbit, fox, roe deer, shrews and field mice, ... (wolf) Reptiles: grass snake, sand lizard, slow worm Insects: cinnabar moth, swallowtail, damselflies/dragonflies, mason bees, wasps

			> 80 mushroom species: brown ring bolete, heath club fungus, giant puffball > 100 lichen species The golf course is located near the NNN and Natura 2000 area Veluwe. Tree map and VTA list available (2020). The golf club is preparing to outsource the maintenance of the natural areas on the course. Until now, much of this work has been carried out by members or outsourced on a project basis. Species information is being collected with great interest. The recommendation is to start observing trends and translate these into what they mean for the management and design of the site. The work protocols were last updated in 2014, so the risks of careless actions are quite high. CCIP: Please update the work protocols implemented in 2014, applying these in daily management.
	N1.1.3 Sound understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site, if applicable	Market Garden (1944) visibly shapes the identity of the course: • Information panels at landing sites • Large information board about the landing (Airborne Division) along a public path • Glider placed at a prominent location (2019) • Veterans hold a special place, e.g., during the annual Airborne Trophy award ceremony There are no specific cultural-historical elements present.
N1.2 Opportunities to naturalise the golf course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Monitor patterns of play to identify underutilised areas of turfgrass	Efforts to expand the heathland area have been made, but results vary. During the site visit, we looked at a location with spontaneous heath growth—the most desirable development, though sometimes difficult to influence. The goal is to work toward approximately 4 hectares of heathland. Currently, about 1.5 hectares have been realized. Shrub development is currently a challenge. In particular, broom and, increasingly, gorse are difficult to keep under control.

			CIP: As per N1.1.1 above. Please develop and further elaborate a vision for landscape development. This will provide direction and targeted allocation of resources. Setting concrete goals for the development of natural values will also help—think in terms of habitat areas and target species.
N1.3 Actively create and manage habitats for wildlife	N1.3.1 Projects to create and manage habitats in the best way for wildlife and golf	Prioritise native species of varying size and structure when planting Prioritise native trees and shrubs when planting Prioritise native aquatic species of varying size and structure when planting Establish mowing buffer zones next to water bodies and wetlands	The nature management plan, including the monitoring program and maps of nature management types (2013), was not updated in 2021. Nevertheless, there is considerable attention to heathland and nutrient-poor grassland management, particularly by combating grass encroachment and shrub invasion.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species	Follow local best practice to protect or attract endangered, protected or rare species found on site	Remarkable is the richness of reptiles such as sand lizard and viviparous lizard, and birds of tree-rich heathland such as stonechat. Volunteers rake away moss and dead plants with a dual purpose: creating germination sites for heath and improving habitat for sand lizards. There are three badger setts in the surrounding area, and badgers regularly use fixed routes across the course, causing hardly any damage.
N2 Turfgrass			
N2.1 Maintain optimum turfgrass and soil health	N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors	Select appropriate grass species for the climate	In the grass species composition, an optimum is sought between drought resistance, minimal inputs, and optimal playing quality. Red fescue and common bentgrass make up the main share. Annual meadow grass covers about 25% of the surface and is suppressed as much as possible by minimizing fertilizer application, watering, and disturbance. Given the intensity of use and the available maintenance capacity, the greens are of high quality.
	N2.1.2 Practices to maintain good soil structure and condition	No specific international requirement, however, identify course management and agronomic activities and look for continual	Before construction, this area was long-used fertilized farmland. When creating undulations, highly nutrient-rich topsoil (from raised areas) ended up right next to very nutrient-poor sand (from excavations).

		improvements	Bunker sand was specially developed (Heicom), tailored to the soil (coarse sand, hair podzol). Soil analyses are carried out in preparation for the fertilization plan and major maintenance.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Test and monitor soil pH; Follow legal requirements when timing fertiliser applications Ensure staff are fully qualified to use fertilisers Ensure staff use appropriate protective equipment Regularly calibrate and test applicators	Use of fertilizers is closely monitored; the head greenkeeper is involved in the DGB group. Nitrogen application on the greens is minimal, with only 59 kg/ha in 2024. CIP: Please explore the possibilities of using organic fertilizers to reduce environmental impact and promote healthier soil.
	N2.2 Prioritise mechanical maintenance	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Change hole locations frequently Nematodes and bacteria are used against leatherjackets. Dollar spot is controlled through targeted irrigation management and rolling the greens on non-mowing days (to break the leaf wetness period).
N2.3 Use chemicals responsibly	N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues	Identify and track pest and disease hotspots, including sensitive areas Scout the course daily for early signs and symptoms Accurately diagnose to determine the cause of weeds, pests and diseases	Use of pesticides is monitored and kept to a minimum. Herbicides are applied on tees and fairways (Tapir, Dicophar, Primstar, Roundup) because bare spots are quickly colonized by weeds (plantain, hawkweed, dandelion). Thanks to the renewal of the irrigation system, turf can now be kept more closed. Spot-treatment of weeds is used, which minimizes the quantities applied. Fungicides on greens (Signum): applied twice in 2022, once in 2023 and 2024, to prevent dollar spot outbreaks and thereby limit the increase of annual meadow grass.
	N2.3.2 Application of chemicals with full safety precautions	Use legally registered and approved products; Prefer products for the specific weed, pest or disease; Follow legal requirements;	The landscaping contractor (De Enk) is a certified company and manages the chemical bookkeeping. A license for crop protection operations is in place.

		Ensure staff are fully qualified to use pesticides; Ensure staff use appropriate protective equipment; Regularly calibrate and test applicators; Dilute and dispose of leftover product on untreated areas of amenity turfgrass	
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 ; Retain no-spray/no-spread buffer areas next to water bodies and wetlands; Retain no-spray/no-spread buffer zones in and around ecologically sensitive areas	Emergency response card for environmental incidents is available. Situation 2019/2020/2025: Grass clippings storage combined with farmer's manure storage in a concrete depot with high edges on three sides; at the front, leachate flows away and affects soil and groundwater.
	N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations	Formal wastewater discharge agreement, if applicable	Cleaning is carried out by a certified company, partly by the caterer itself, using biodegradable products.
	N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations	Wash machinery over an impermeable, leak-free surface; Mix and load pesticides and fertilisers over an impermeable, leak-free surface; Triple rinse pesticide containers and applicators	Buildings of the former arable farm are used for greenkeeping and partly by the farmer for storage and maintenance equipment (concrete slabs with sealed joints). Floors comply with legal requirements; the owner is responsible for this, as well as for emptying grease and oil pits (done by a certified company). Major maintenance and grinding are carried out centrally by the landscaping contractor (in a nearby village), minimizing environmental impact on-site. An oil leakage emergency response card is available.

N3.2 Safely manage hazardous substances	N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances	List of hazardous substances, made available to authorised staff; Product and material data safety sheets; Well ventilated concrete or metal building; Impermeable, leak-free flooring; Sufficient storage capacity; Spill containment kits; Secondary containment e.g., bunds or drip trays; Emergency wash area, as per local requirements (body shower and / or eye wash station); Hazardous substances safely collected by a registered company or body ; Follow any additional legal requirements	The landscaping contractor (De Enk) is a certified company and operates in compliance with legislation. A 4,000-liter double-walled diesel tank is managed by the farmer. Used oil is collected in a drum and removed when full. Chemicals are stored in an approved cabinet; chemical bookkeeping is maintained by the head greenkeeper.
	N3.2.2 Legal compliance in the storage and handling of fuels and gases	Tank secured to a horizontal, flat, non-combustible surface; Secondary containment of fuel in the event of spills e.g. bunds and drip trays; Inspection of storage tank(s) at least quarterly, if required; Fire extinguisher in the immediate area	Overview of hazardous substances and their locations is available. The crop protection cabinet complies with regulations, as does the diesel tank. Drip trays are present.
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate wastewater usage, treatment and discharge	Impermeable, leak-free surface; Treatment as per local requirements (oil, grease and / or clipping separation; Formal discharge agreement, if applicable	Oil and grease separators are present, ensuring that water is pre-treated before being discharged into the sewer system. On the course, sanitary facilities have been installed. However, this is an off-grid solution in the form of an eco-toilet.

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	Select appropriate grass species for the climate e.g., drought and disease tolerance; Target irrigation to essential playing surfaces; Prioritise native, drought tolerant species for landscaping and planting	Groundwater is pumped from a depth of 25 meters at three locations; usage is closely monitored: 2022: 66,634 m³ 2023: 31,160 m³ 2024: 19,346 m³ The amount fluctuates based on rainfall. It is expected that the average annual volume will decrease thanks to the modernized irrigation system with single-head control and double rows on the fairways. Machines are cleaned with air, and in wet weather with groundwater.
R1.2 Maximise water efficiency	R1.2.1 Practical measures to use water more efficiently on the golf course	Schedule irrigation based on informed assessment of soil moisture and weather forecasts; Evaluate new irrigation technologies e.g., central control, precision sprinklers etc.; Provide staff training on efficient irrigation practices; Adjust sprinklers to playing surfaces only	Wetting agent is applied to greens when necessary. Water requirements are adjusted based on moisture measurements and weather forecasts. The priority is to keep the grass alive, so during prolonged drought, fairways are eventually irrigated as well.
	R1.2.2 Practical measures to use water more efficiently in buildings	Monitor and record water consumption (bills, flow meter etc.); Encourage water conservation practices amongst players and staff	1,654 m³ of mains water used in the clubhouse (2024), 150 m³ of mains water used for greenkeeping (2024). Sanitary facilities are equipped with water-saving features.
R1.3 Source water responsibly	R1.3.1 Measures towards alternative, lower quality sources of water	Water abstraction permit, if required;	There are considerations for creating water storage on adjacent land to enable irrigation from an on-site basin during periods of drought.

		Report water consumption to environment agency, if required	CIP: Please consider combining the project for driving range modifications with the task of creating water storage. In any case, prioritize the theme of minimizing groundwater extraction during the period 2026–2031.
R2 Energy			
R2.1 Reduce energy demand	R2.1.1 Measures to reduce the amount of energy consumed in golf course maintenance	Naturalise non-playing areas to reduce mowing and other energy intensive inputs	In recent years, significant progress has been made in the area of energy efficiency. Consumption has been mapped, savings opportunities identified, and options for generating energy have been pursued. This has resulted in: • 128 solar panels (30% reduction in purchased electricity) • Boiler switched off (50% reduction in stored hot shower water) • Improved pipe insulation There is a desire to replace the central heating system with, for example, a heat pump, but this will only be possible once the maximum available electricity capacity of the grid connection is increased. CIP: Please explore the electrification of the greenkeeping machinery fleet.
R2.2 Maximise energy efficiency	R2.2.1 Measures to use energy and fuels more efficiently in buildings	Monitor and record energy consumption (bills, meters etc.)	As described above, there has been significant attention to this theme. All lighting has now been converted to LED.
R2.3 Source energy responsibly	R2.3.1 Measures to source alternative, renewable forms of energy	Understand the energy mix of your electricity supplier; Explore possible greener energy providers	With the installation of 128 solar panels, a major step has been taken. It is being considered to include solar panels as an integral component of the driving range renovation project.
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	No specific international requirement, however, identify activities to reduce the demand for materials and look for continual improvements	Fertilization is extremely limited, resulting in minimal material purchases. Packaging materials in the hospitality area are recyclable. CIP: Please assess whether further reduction of packaging materials is feasible in the hospitality operations.

R3.2 Purchase responsibly	R3.2.1 Commit to sustainable purchasing practices	Favour responsible, lower impact products	There is attention to procurement, but this can be elevated further through better coordination with hospitality. Given the plans for a new course maintenance contract in the coming period, there are opportunities to make procurement more sustainable. CCIP: Please develop a sustainable procurement policy covering all aspects of the facility. This should ensure that sustainability themes and ecologically responsible management receive sufficient attention across the tender for golf course maintenance, clubhouse and hospitality.
R3.3 Reuse and recycle	R3.3.1 Waste stream separation for maximum recycling and re-use opportunity	Put in place a recycling separation system, according to local rules and availability; Clear, simple and visible bin signage; Monitor and record weight of waste for each stream e.g. invoices, bills etc.	Glass and paper are recycled. Heelsum was one of the first courses in the Netherlands to remove waste bins from the course. This reduces landscape clutter and minimizes transport movements for emptying bins. At the clubhouse, waste is collected separately, including SWILL (organic kitchen waste).
R3.4 Demonstrate legal compliance	R3.4.1 Compliance with all local and regional waste management regulations	Authorised waste collector for general, hazardous, industrial and green waste, if required	The waste processor (certified and compliant with regulations) separates plastic and metal centrally, so pre-sorting is not necessary. Waste collection is scheduled periodically, with additional pickups if needed.

COMMUNITY			
<u>C1 Health & Wellbeing</u>			
Objectives	Requirements	Mandatory Practices	Verifier Notes
C1.1 Improve health and wellbeing	C1.1.1 Benefits to human physical and mental health from golf and facility activities	Plans in place to respond to incidents and emergencies	A safety plan is in place; incidents are recorded and evaluated, and the plan is adjusted where necessary. Emergency services can access the course at three locations.

			First aid responders (BHV) are present in sufficient numbers and receive regular refresher training. AEDs are checked annually.
C1.2 Be open and inclusive	C1.2.1 Inclusivity and diversity in membership and visitor policies	Membership policies free from discrimination across age, gender, sexual orientation, religion, and ethnic background	The membership base, as with most golf courses, is aging. However, there has been successful attention to youth and golfers under 44 years old. A new membership model has been introduced, whereby full membership is paid from the age of 44. This makes it more accessible for a broader target group to join the golf club.
C1.3 Employ fairly, safely and provide career opportunities	C1.3.1 Ethical and legal employment, working conditions and professional development	Adopt an equal opportunity recruitment and hiring policy; Follow all relevant legislation and best practice for hiring and employment; Follow all relevant legislation and best practice for worker safety	13 employees, of which 1 is full-time. Former farmer Dirk is still involved in the maintenance of the course.
<u>C2 Outreach & Inclusion</u>			
C2.1 Diversify access and provide multifunctionality	C2.1.1 Social and recreational activities at the facility	No specific international requirement, however, identify multifunctional activities and look for continual improvements	Restaurant is accessible to everyone. Walkers are welcome during the annual Airborne walking tour; there is a 3 km public walking and cycling path through the course, as well as walking routes including the <i>Klompepad</i>. A large information board along the public path tells the story of the Airborne Division landing. Opposite the clubhouse, a glider has been placed (2019), reinforcing the identity of the location.
C2.2 Provide for volunteering and charity	C2.2.1 Opportunities available for volunteering and support of charities and good causes	No specific international requirement, however, identify activities to support volunteering and charity and look for continual improvements	Volunteers are actively involved in course maintenance and in Bird Watching Day, led by a local bird expert. The Airborne Tournament is the highlight of the year.

C2.3 Establish active community partnerships	C2.3.1 Positive and constructive engagement with neighbours, the local community and other groups	No specific international requirement, however, identify partnerships and community activities and look for continual improvements	Strongly underpinned by a covenant with '5 Villages in the Green', Natuurmonumenten, and the golf club during the planning phase. Direct contact with the municipal government led to a valuable exchange and appreciation for the social and economic role of the golf club. Once again, it proved that unfamiliarity breeds indifference. The expansion with two holes on the northern side was met with enthusiasm from local stakeholders due to its contribution to the landscape and natural value.
C3 Communications & Advocacy			
C3.1 Engage staff and golfers	C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors	Involve staff and committees in sustainability efforts; Involve golfers in sustainability efforts; Post sustainability information in the clubhouse and / or on the golf course	Communication about sustainability has been initiated and receives significant attention to maintain support. Sustainability and nature topics are regularly featured in newsletters. There is strong consideration to publish an edition showcasing all plant and animal species found on the golf course.
C3.2 Celebrate and promote sustainability	C3.2.1 Activities that raise awareness and engage people in the wider community	Share at least 3 Highlights on sustainable.golf	Annual commemoration of Operation Market Garden and the airborne landings that took place on and around the golf course location in preparation for the Battle of Arnhem (1944). Information and striking photos about nature, landscape, and sustainability are featured on the website and in newsletters.
C3.3 Follow a journey of continuous improvement	C3.3.1 Measures to help track, review and improve sustainability and climate action	Put measures in place to ensure that OnCourse can be updated annually	One of the positive developments in recent years is the organizational change that led to the establishment of the Sustainability Committee (DUCO) and the inclusion of sustainability as one of the pillars of policy. This provides greater impact and focus on further sustainability efforts in the coming years.

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