GEO Certified® Report
Golfresidentie Dronten

Prepared by independent verifier: Paul van Kan

Certified by GEO Foundation: 2023
Recertification due: 2026

“Golf Residentie Dronten stands out for its unique combination of living and golfing. The residents of the park are not only co-owners of the course but are also entitled to two playing rights which can be made available to 'outside members'. This arrangement results in a stable membership base. Green fee players are also welcome. The course borders the grounds of Openbare Golfclub Dronten, with which facilities are shared. Golf Residentie Dronten has the character of a village with a well-developed sense of community. All residents contribute to this.

A special feature of the golf course is its structure from inside to outside: in the core, built-up areas lie like islands between greenery and water, while towards the outside, the design seeks contact with the landscape via sightlines. The level of intensity in use also decrease toward the outer edges with space for natural processes along the outer edge. Here lies a wide ecological corridor that has been developed in a short time into a beautifully varied site with high biodiversity. The corridor contributes to the NNN (Nature Network Netherlands).

The park manager manages both the golf course and the residential area, using 'Greenpoint' (online platform for managing public space). Contacts with residents are strong, suggestions are taken up and implemented where possible. For residents, there are two important rules: no yard fences may be used on the golf course side and on the access side, the greenery is in the hands of the park management. Smart solutions and effective combinations are being sought. The approach is sustainability and self-reliance. Examples are the development of a grass waste distributor and the closed water system. There are plenty of future plans, such as the optimisation of the greenkeeping location. There is a wonderful foundation that will be made more sustainable in the future.”

Paul van Kan
(GEO accredited independent verifier)

Introduction

GEO Foundation is pleased to confirm that Golfresidentie Dronten 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.

Golfresidentie Dronten 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, Golfresidentie Dronten should be awarded GEO Certified® status.

For the certification period stated above, Golfresidentie Dronten 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
Manager, Data and Reporting, GEO Certification Ltd.

Verification and Certification

Verification

The official third-party audit was carried out by an independent verifier, accredited by GEO to undertake verifications of golf facilities applying for certification.

Verification involves reviewing practices and data, using the International Voluntary Standard for Sustainable Golf Operations as the guide to ensure comprehensive and consistent evaluation of performance. A detailed verification report is submitted for evaluation by GEO Certification Ltd, a subsidiary of GEO Foundation.

Certification

GEO Certification Ltd, an autonomous subsidiary of GEO Foundation [both not-for-profit entities], undertook a full review of all content submitted through the OnCourse® online platform and the report submitted by the verifier, ensuring:

- Comprehensiveness – that activities undertaken touched on all elements of the Standard
- Consistency – that the verification approach was balanced, well weighted and with consistent depth of evaluation across each theme
- Accuracy - matching the verification report with evidence submitted by the golf facility to ensure statements and claims were accurate

GEO Foundation is an international not-for-profit founded to advocate, support and reward sustainability in and through golf. Over more than ten years, the group has worked collaboratively with dozens of golf industry associations and government and non-government organisations around the world, to help golf become a sustainability leader, striving for a net positive social and environmental impact. In addition to managing and assuring GEO Certified®, GEO Foundation also provides a suite of credible, practical programmes for golf facility management, new golf developments and golf tournaments called OnCourse®, often delivered in partnership with national golf bodies. Find out more at **www.sustainable.golf**

Credibility

GEO Certified® is part of the ISEAL Alliance, a group of the world's foremost credible certification systems including Fairtrade, Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council and many others. GEO Foundation earned and retains full membership of the ISEAL Alliance global association following a rigorous evaluation against the ISEAL Codes of Credibility in Sustainability Standards and Certification. The ISEAL Codes cover standard-setting, assurance, and monitoring and evaluation. Find out more at **www.isealalliance.org**

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

THEMES	ACTION AREAS
Nature	• Habitats & Biodiversity • Turfgrass management • Pollution prevention
Resources	• Water • Energy • Materials
Community	• Partnerships & Outreach • Golfing & Employment • Advocacy & Communications

Included below are the observations made by the Independent Verifier against each item in the Standard.

NATURE

N1 Habitats and Biodiversity

Objectives	Requirements	Mandatory Practices	Verifier Notes
N1.1 Understand the site and surroundings	**N1.1.1 Sound understanding of the nature and landscape value of the site**	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	Annual fauna inventory by a nature and environment working group, which is led by a professional resident. Direct contact with a local nature organisation IVN.

				Special species: reed orchid, bats, barn owl, barn swallow and kingfisher. **CCIP: Please expand the inventory to include flora, focusing on some promising parts such as the sparse riparian zones. Please monitor developments and adapt management accordingly.**
		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	Golf course is part of an ecological connection around the core of Dronten. Habitats are mapped and maintained in a GIS system (greenpoint). Inspection of trees by external professional 1x per 3 years (VTA). Activities in/around the shed have been carried out after ecological research and protocol. Code of Conduct on Sustainable Management and Maintenance' is followed during management. **CCIP: Although management follows legally approved codes of conduct, please establish an ecological work protocol tailored to the local situation. This is to ensure careful handling of ecologically sensitive sites and alignment with sensitive periods.**
		N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	Recent cultural history: the golf course fits within rectangular contours of the polder. Respect for heritage e.g., preservation of potato shed, yard bounded by tree line etc.
	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	Flower mixture sown to help insects. Habitats are widened where possible **CIP: There are good opportunities to narrow and naturalise the rough that is in play. The transition to water is particularly**

			promising with reed orchid, rattle and roller clover. Here, orchids can be mowed later, after seed setting.
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	Hedgerows in gully-shaped lowlands between holes and around dwellings. Alder, willow and birch, under coppice management; trees under annual pruning. Aim is 100% natural, unspoiled banks. Shoring will not be replaced. Natural grass under clearance management; mowed twice a year by the farmer; orchids skipped, second cut only. **CIP: Please aim for forest edge development, where possible. Please try to replace the tree layer partially with a varied shrub layer.**
N1.4 Conserve key species	**N1.4.1 Practical conservation measures for priority species**		2 km long to 60 m wide L-shaped eco-corridor along outer edge under nature management. Many features, often in eco-corridor: 120 nest boxes, owl box, bat boxes, insect hotels, hedges, branch rills, ponds. Fences around gardens not allowed, so barricades for animals are missing.
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: mainly argostis tenuis. Tees: mix of lolium and agrotstis stolonifera. Fairway and rough: mix of grasses. Due to tight management programme, reduction of street grass (approximately 20%) and increase of ostrich grass: watering with policy, less manure, scarifying, aerating, dressing, overseeding with ostrich grass.

		N2.1.2 Practices to maintain good soil structure and condition		Construction according to closed soil balance, i.e. on heavy clay. Holes constructed with slight bulging, so that water runs off laterally into depressions. External consultant: fertilisation and cultivation advice 3x/year based on control measurements.
		N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Low, non-organic fertiliser NPK, especially on fairway low. Partly because of nutrient-rich clay. Low application rates help to limit street grass.
	N2.2 Prioritise mechanical maintenance	**N2.2.1 Non-chemical pest, disease and weed management**	Sharpen mowing blades; Remove surface moisture; Hand weeding	Greens are monitored daily for harmful organisms. Emelt control in various ways: cover greens in the evening with light-proof plastic; mow up emelts with the greens mower in the early morning; use nematodes if damage becomes too great; flowery grass strips attract parasitic wasps; nesting boxes for starlings and tits. Weeds: hot water and brushing, weeding. Fungi: prevent by timing aeration and watering. Processionary caterpillar: remove nests.
	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	Aim: no use of chemicals. IPM applied: all data completed or present. Statement crop protection agents: 'unauthorised agents not used'. Target values determined and checked by professional. Baseline and control measurements annually by quality manager.
		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;	Meets all requirements when using chemicals. Spraying licence present and protocols in place.

		Use appropriate protective equipment; Dilute and dispose of leftover product on untreated areas of turf .	
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.	Protocols hydraulic leakage and spray-free zones (6 m wide). Monitoring surface water quality periodically.
	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	Not applicable as there is currently no clubhouse.
	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	Temporary location without liquid-proof floor on spray-off and tanking site. Filling above concrete slabs; granules present in case of leakage; protocols in place. Contamination prevented in all possible ways: spraying with air, maintenance and cleaning at central workshop or at nearby petrol station; careful checks of machines, possible leaking machines to central workshop. NB: this temporary situation is unforeseen and has to do with decision around ownership situation. Once that is clear, an investment in a new shed and floor can be made. **CCIP: Please install impermeable flooring as soon as possible.**

	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	Single-walled diesel tank 2500 litres with installation certificate KIWA (2016) valid until 2031; this is in a large, lockable drip tray. No chemicals on site (at central workshop elsewhere). Fire extinguishers and protocols in place. Waste oil to central workshop elsewhere.
	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)	Drain for the greenkeepers shed via central point and pumping station on municipal sewer. Discharge of clean water into ring ditch.

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 water is local surface water flowing to irrigation pond. Always ample so groundwater abstraction permit never used. Only greens and tees, fairways rarely sprinkled (local, manual). NB: Pumped water temporarily not measurable due to (external) incident at network operator.
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;	Sprinklers matched to soil moisture content. Sprinklers aimed at game elements (semi-circle). Water-absorbing clay soil is a natural advantage.

			Ensure irrigation schedules are informed by weather patterns and soil moisture analysis	Deep rooting grasses so less drought prone. Wetting agents on drought-sensitive greens.
		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	Tap water consumption is extremely low, as players prefer to shower at home. Compressed air is used for cleaning machines Please note that due to the special situation (members live on the golf course) there is hardly any use of central facilities.
	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	Closed water system: - water flows through slightly convex fairways towards pocket ditches (gullies) - only the tees and greens are artificially drained - houses with separate drainage of clean and dirty water, with clean water to gullies - rainwater is returned via gullies to groundwater - own, constant water level in irrigation pond, fed by local groundwater
	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	Diesel consumption quite low, petrol high. Diesel mowers and tractors - 4 electric and 2 petrol walk-behind mowers. Area to be cut kept to a minimum **CIP: Please explore opportunities to further reduce maintained area and mowing frequency.**
	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	Exterior lighting district phased on LED. Car park lighting fitted with LED and sensor.

				Greenkeepers shed: only small office space electrically heated. Renovation plan is ready, waiting for decision (see N3.1.3) NB: due to the exceptional situation (members live on the golf course) and aftermath of corona, the clubhouse is largely not in use (not profitable enough). Therefore there are no usable energy consumption figures. Central facilities, such as lighting outside areas, are run via the VVE.
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	No own energy generation (see N3.1.3).
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	Contractor greenkeeping pays full attention to this.
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	Greenkeeping: procurement based on a sustainable purchasing policy. Choice of hybrid or electric when purchasing new machines.
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	Reuse own material: rubble, own compost, wood chips. Reuse of existing potato shed for greenkeeping. Grass from nature trough is used by a farmer for his sheep. Contractor developed grass waste distributor. Grass waste-distributor: - cut grass is collected in the collection bin and then deposited in the grass distributor

				- grass is distributed as fertiliser for sparse areas on fairways and rough - less waste transported, immediate recycling, less fertiliser needed
	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	Recycling programme with description of waste streams. Waste collection in combination with other local companies. Separation of green waste. Residual waste collected in containers, with collection on demand. **CIP: Please explore where branch waste and leaves can be processed in the heart of some wooded belts. This saves transport and provides added ecological value (roosts, hedgehogs and many insects which in turn provide food for birds and small mammals).**

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**		Strong sense of community among Golf Residence residents. Many activities by residents, for residents: lectures, boules, walking and cycling club, drinking coffee, exhibitions, dinners. Walk 2x / year (history, course maintenance, results group Nature & Environment). Private club, but nature trail accessible to all

				CIP: Please update the information signs along the nature route. Providing accessible information in an attractive way to explain what can be seen and how the site is being managed accordingly.
	C1.2 Provide for volunteering and charity	**C1.2.1 Opportunities available for volunteering and support of charities and good causes**		Village feeling, with everyone using their abilities. Much is tackled together; Two volunteer groups: Nature&Mileu and Hardware (shelters, light).
	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'	Park manager functions as management coordinator and directs greenkeeping. Contacts with authorities are practical in nature: management of watercourses in cooperation with the water board. Frequent contact with relevant aldermen and province. Cooperation with local nature association. Cooperation with neighbouring golf course/club, hospitality chain surrounding clubs; Support for local fairtrade network.
	C2 Golfers & Employees			
	C2.1 Improve health and wellbeing	**C2.1.1 Benefits to human physical and mental health from golf and facility activities**		Protocol Accidents and Calamities (clear diagrams for various types of incident). Communication system with Marshall as central reporting station. Ambulance service is met at entrance and sent to incident. VTA ensures safe tree stock. Shelters equipped with lightning rods.

			CCIP: There is only one entrance/exit, requiring over 1,000 people to pass through in the event of a major emergency. Please consider a second emergency exit for the district. This should also provide access for ambulance services from the other side.
C2.2 Be open and inclusive	**C2.2.1 Inclusivity and diversity in membership and visitor policies**	Demonstrate inclusive policies for members and visitors	900 members (also residents) can give membership free to 'outside members'. Female-male ratio in balance. Socially disadvantaged are helped. Buddy system for young people. Accessible for people with disabilities. Residents decide together through VVE construction.
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 and collective labour agreement. CPD following. Training for greenkeepers, including on biodiversity protection and sustainable action. Wajong places when expanding staff (ambition). Cooperation with training companies and work experience places.
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	Communication via SMS, website, newsletter. Public walks nature experience led by local IVN guide. Present forest with personal trees residents is successful, to be extended.

				Residents can have frequent meetings with park manager (wishes and requests of residents are presented to commissioner).
	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	Clear website with information on management. Hiking via nature route. **CIP: Please use this recertification as momentum to highlight the sustainability of Golf Resdentie Dronten. This can be done through a tour for relevant organisations and policy institutions, a press release, and attention on the website. Please explain the motivation and benefits of achieving GEO Certification.**

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