



**GEO Certified<sup>®</sup>**

# GEO Certified<sup>®</sup> Report Antognolla Golf

Prepared by independent verifier, Paolo Croce

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

**GEO Certified<sup>®</sup>**

The logo features a green circular icon with a white golf ball inside, followed by the text 'GEO Foundation' in bold green, and the tagline 'Sustainability in and through golf' in a smaller green font below it.

**GEO  
Foundation**  
Sustainability in and through golf

*“Antognolla Golf has great ecological potential, due to its size, present habitats and non-use of pesticides. It is a highly sensitive, low-population density area and this should be considered with any future development. The course is well-designed and well-maintained within the surrounding environment and the staff are of the highest level. There is a commitment to changing the turfgrass on tees and fairways in 2022 and this has already begun. I look forward to observing this in the near future, and to seeing how the development integrates cultural heritage restoration, ecological protection and community value during this period of certification.”*

*Paolo Croce*

*GEO accredited independent verifier*



# Introduction

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GEO Foundation is pleased to confirm that **Antognolla 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.

**Antognolla 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, **Antognolla Golf** should be awarded GEO Certified® status.

For the certification period stated above, **Antognolla 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

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## 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](http://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](http://www.isealalliance.org)



# Verifier's Report

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

THEMES	ACTION AREAS
<b>Nature</b>	<ul style="list-style-type: none"> <li>• Habitats &amp; Biodiversity</li> <li>• Turfgrass management</li> <li>• Pollution prevention</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Energy</li> <li>• Materials</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>• Partnerships &amp; Outreach</li> <li>• Golfing &amp; Employment</li> <li>• Advocacy &amp; Communications</li> </ul>

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 club has commissioned to Lusios Srl a complete report on ecosystems, Flora and Nature. (Ecosistemi, Flora e Fauna – Lusios Srl – Perugia 2018). The document is updated to 2018 and is very complete including:

			General and regulatory framework Description of pre-construction and post-construction status.
	<b>N1.1.2 Knowledge of legal designations for protected areas, habitats and species</b>	Understand legal responsibilities for protected landscapes and species; Record and monitor protected, endangered, or rare species found on the site	In the document mentioned above there is a list of vegetation and fauna components and the green legislation operating in this country. There is also a description of all the impacts and mitigations during construction and those provided during management
	<b>N1.1.3 Understanding and respect for cultural heritage</b>	Protect any archaeological, historical or cultural designations on the site	There is a study for the conservation and restoration of the historical and cultural heritage of the castle adjacent to the golf course
<b>N1.2 Opportunities to naturalise the course</b>	<b>N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass</b>	Observe, track and / or monitor golfer play	The design of the course allows you to limit the playing surfaces to strictly necessary areas. Despite this, the playing surface at the time of this visit measures 34 ha compared to the total 55 ha of the course, i.e. 62%. This % is reduced if we take into account that the area occupied by greens, tees and fairways is just under 12 ha, but shows there is scope for a greater extent of habitat bordering these play areas. In any case we have to consider the total area of the facility is more than 200 ha.  CIP – Look for out-of-play areas that could accommodate more rough grassland and scrub vegetation
<b>N1.3 Actively manage habitats for wildlife</b>	<b>N1.3.1 Projects to manage habitats in the best way for wildlife and golf</b>	Regularly review and follow a habitat management plan; Prioritise native species when planting and landscaping	The club does not have a formal written document on the matter, but the superintendent is qualified at National School of Golf, and he is aware of the importance of protecting the original habitats. Several areas out of the course are subject to naturalization efforts and on the whole are inserted into the landscape from time-to-time native trees and shrubs and part of the landscape of the area  CIP – Develop a more formal habitat management plan
<b>N1.4 Conserve key species</b>	<b>N1.4.1 Practical conservation measures for priority species</b>		Based on the attached document they are usually taken measures for conservation of priority species
<b>N2 Turfgrass</b>			
<b>N2.1 Maintain optimum turf and soil health</b>	<b>N2.1.1 Appropriate turfgrass varieties adapted to climatic and other geomorphological factors</b>	Select appropriate grass species for climate	Cool season species are established in all the areas of the course. <i>Agrostis stolonifera</i> is dominant in greens, tees and fairways. The most common weed is <i>Poa annua</i> . Considering the site and the location, cool season (particularly <i>Agrostis spp</i> ) are not suitable in this climate of Central Italy on tees and fairways. In addition, the quantity of water available for the irrigation system does not allow to maintain the <i>Agrostis/Poa annua</i> turf in optimal conditions during the summer period. Furthermore, an <i>Agrostis/Poa annua</i> turf is

			<p>very susceptible to any diseases and very needy of nutrients. The resort director and superintendent are aware of the need to replace this turf with cvs Bermuda or other warm season grasses, which long-term will be much more sustainable.</p> <p><b>IIP</b> – The facility has committed to transitioning turfgrass species on fairways and tees to Bermuda (cv Tahoma 31). A follow-up visit will be arranged in the second half of 2022 to see how this is progressing.</p>
	<b>N2.1.2 Practices to maintain good soil structure and condition</b>		Considering the very heavy soil (for the most clay and silt) the superintendent is able to improve the soil physical characteristic through cultivation operations, including forking, coring and slicing.
	<b>N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation</b>	Undertake soil tests and nutrient analysis	The superintendent carries out soil analyzes on a regular basis and sets the fertilization program on them. The distribution of nutrients takes into account the needs of the dominant species and the seasonal growth curve. The choice of fertilizers used is well dosed even if, perhaps, a greater use of natural organic products could be more sustainable
<b>N2.2 Prioritise mechanical maintenance</b>	<b>N2.2.1 Non-chemical pest, disease and weed management</b>	Sharpen mowing blades; Remove surface moisture; Hand weeding	All the listed operations are carried out with the right frequency
<b>N2.3 Use chemicals responsibly</b>	<b>N2.3.1 Application of chemicals only when necessary to prevent or cure defined / identified turf health issues</b>	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	Due to the presence of PAN, Piano di Azione Nazionale which prohibits the use of chemicals on golf courses, great importance is given to the prevention especially of fungal diseases. The problem is that <i>Agrostis stolonifera</i> , in Italy, is the most sensitive species to attack by fungi. They try to focus on the competitiveness of <i>Agrostis</i> to reduce the presence of weeds, and the action is, all in all, effective ( <i>Poa annua</i> excluded).
	<b>N2.3.2 Application of chemicals with full safety precautions</b>	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	No chemicals are used to control pests. A few biological products are under observation and tested on greens. The superintendent is professionally qualified and able to comply with all the safety regulations indicated by the Italian law, but also the additional suggestions provided in terms of environmental protection by the National Golf School
<b>N3 Pollution Prevention</b>			

<b>N3.1 Prevent pollution across the entire site</b>	<b>N3.1.1 Practical measures to ensure pollution risks are minimised from golf course operations</b>	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.	There is no specific plan to deal with any emergency situations regarding the leakage of liquids destined for distribution on the turf. After all, there is no possibility of using them. The buffer zones are not mapped, but the staff maintains a safe distance from possible sensitive areas (water bodies, valuable vegetation, etc.), as regards the distribution of fertilizers in liquid and granular form. As we wrote, pesticide distribution is not allowed  CIP – more comprehensive mapping of course components to include buffers
	<b>N3.1.2 Practical measures to ensure pollution risks are minimised from clubhouse operations</b>	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required standards and systems for hazardous waste and wastewater discharge	As regards the clubhouse and maintenance facility, the storage and distribution of potentially dangerous materials (fuels, lubricants and more) takes place in full compliance with the legislation in force. The same for wastewater discharge.
	<b>N3.1.3 Practical measures to ensure pollution risks are minimised from maintenance facility operations</b>	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 machine washing area is waterproof and equipped with the legal devices
<b>N3.2 Safely manage hazardous substances</b>	<b>N3.2.1 Legal compliance in the storage, handling, application and safe disposal of all hazardous substances</b>	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 storage and use of potentially hazardous substances takes place in accordance with the law
<b>N3.3 Responsibly manage waste / storm water</b>	<b>N3.3.1 Appropriate wastewater usage and discharge licences</b>	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	The discharge of wastewater takes place in accordance with the law- The machines washing platform located at the maintenance facility is equipped with an organic material separator (clipping) and oil/grease separator



## 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	<p>The superintendent is able to use the technology necessary to reduce the overall amount of water destined for the course, but the biggest problem is always represented by the dominant presence on the whole course of the two most demanding species from the water point of view (<i>Agrostis stolonifera</i> and <i>Poa annua</i>)</p> <p>CIP – Audit requirements for water storage and irrigation with the new grass species. Potential development of the area to include an exploration into the use of treated wastewater from the resort / residences.</p>
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	In principle, all precautions have been taken to reduce irrigated surfaces, to optimize irrigation rates both in terms of quantity and frequency. There are no issues in terms of knowledge, on the part of the staff, of the need to study all possible strategies to reduce the large water requirement. The staff attended professional training courses also for the maintenance in perfect efficiency of the irrigation system in all its components.
	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	At the moment there are no large building structures present, there are a small bag shelter, changing rooms, offices and a mini bar restaurant. The clubhouse will be built in the years to come with a range of modern efficiency measures. At the moment, therefore, there are no large water consumptions linked to the use of the structures also because the annual number of rounds is still very low (about 12,000).
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	The main source of water supply for the course is an artificial basin whose volume is insufficient for the annual needs of the current turf. In the approval phase, the supply of water through wells to make up for the shortage of water reserves, often concomitant with periods of low atmospheric rainfalls

### R2 Energy

<b>R2.1 Reduce energy demand</b>	<b>R2.1.1 Measures to reduce the amount of energy consumed in course maintenance</b>	Minimise areas of managed turf to reduce mowing, irrigation, and turf inputs	Thanks to the quality of the design (Gary Player staff) the playing surface is reduced with particular regard to the fairways
<b>R2.2 Maximise energy efficiency</b>	<b>R2.2.1 Measures to use energy and fuels more efficiently in buildings</b>	Audit energy use regularly; Regularly review bills; Categorise and track energy consumption	At the moment there is no clubhouse and consequently there are no special measures taken in this regard. Development of these facilities will include a range of modern efficiency measures
<b>R2.3 Source energy responsibly</b>	<b>R2.3.1 Measures to source alternative, renewable forms of energy</b>	Determine potential sources of renewable energy in the area and on-site, through renewable energy providers	The same above. All the golf carts are equipped with electric powers. According to the objectives that have been set, the new clubhouse will have the best technology can offer in terms of renewable energy.
<b>R3 Materials</b>			
<b>R3.1 Reduce materials demand</b>	<b>R3.1.1 Products and materials selection based on necessity, including opportunities for recycled, reused and locally sourced alternatives</b>	Undertake a review of materials consumed	Confirmed
<b>R3.2 Purchase responsibly</b>	<b>R3.2.1 Practical use of an ethical / environmental purchasing policy</b>	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	More than 50% of appliances A rated or equivalent. In the temporary buildings there are LED bulbs, automatic timers and sensors.
<b>R3.3 Reuse and recycle</b>	<b>R3.3.1 Waste stream separation for maximum recycling and re-use opportunity</b>	Demonstrate waste separation, reuse and recycling; Track how much waste goes to landfill, or is reused / recycled	Confirmed
<b>R3.4 Demonstrate legal compliance</b>	<b>R3.4.1 Compliance with all local and regional waste management regulations</b>	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		The property policy is to encourage staff and members to represent the facility in local community groups.
C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		None at the moment, but expected to come into action with increased use of the resort and facility.
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 property and management are still early in existence for a fully formed policy. Even the resort is still in a phase of development, but there will be an opportunity to include departmental staff and local stakeholders in regular meetings on sustainability from an early point. There are a few collaborations with local schools and with closed clubs.  CIP – Begin to outline and form the structure and responsibilities of a sustainability group / committee for scheduled meetings
<b>C2 Golfers &amp; Employees</b>			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		The management is now organised in order to allow access to the site to use the nature trails, both on foot and by bike. In the absence of complete fences, access to hunters is allowed in accordance with Italian legislation.
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	Confirmed
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

<b>C3 Communications</b>			
<b>C3.1 Engage golfers and members</b>	<b>C3.1.1 Communications activities that raise awareness and understanding amongst members and visitors</b>	Provide information on the facility's sustainability commitments, actions, or achievements	Participation in GEO OnCourse and certification is a good starting point. The resort will have numerous opportunities to educate and inform guests and golfers.
<b>C3.2 Celebrate and promote sustainability</b>	<b>C3.2.1 Activities that raise awareness and engage people in the wider community</b>	Provide evidence of external communications and community engagement	There are currently no official collaborations in place with environmental or other groups, but local schools, walkers, bikers and clubs all utilise the area.

## 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](http://www.sustainable.golf)