



GEO Certified®

GEO Certified® Report Avalon Golf Estate

Prepared by Independent Verifier, Warrick Stewart

Certified by GEO Foundation: March 2020
Valid until: March 2023

GEO Certified®

 **GEO
Foundation**
Sustainability in and through golf

“Avalon is a well-managed facility that is continually reducing its environmental footprint, considering and protecting nature in its operations, effectively partnering with local communities and government, and supporting golf development in Mauritius”

Warrick Stewart

GEO accredited Independent Verifier



Introduction

GEO Foundation is pleased to confirm that Avalon Golf Estate 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.

Avalon Golf Estate 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, Avalon Golf Estate should be awarded GEO Certified® status.

For the certification period stated above, Avalon Golf Estate 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.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	Map all habitats and vegetation types on the site; Regularly update landscape / biodiversity surveys	The EIA identified that dense patches of remaining indigenous vegetation (including 8 endemic flora species, but none on the IUCN Rd List) should be preserved, but prior to development the majority of the facility footprint was cultivated for sugarcane

		production. Endemic species such as Bois Banana, Lian Cacapoule, Bois Manioc à Grandes Feuilles, Bois de Natte were to be replanted within the areas cleared of invasive plants. A Palm and Grasshopper species present within the facility footprint were identified as unique to Mauritius and Reunion by a local NGO. Mauritian Wildlife Foundation identified <i>Passonia pansionata</i> as present in the facility footprint, with only 4 on the island in total. <i>Ravenala</i>'s were initially removed, due to mosquito concerns, but after finding the grasshoppers, this was stopped. No-go area buffer in place around location of <i>Passonia pansionata</i>. Landscaping informed by local botanist. No management measures in place for grasshopper yet. A lot of wild (stray) domestic dogs are present in the area. Deer are present on a farm next door, which the dogs hunt. Avalon has a programme to spay stray dogs as they come onto the facility. Their security service is feeding the spayed dogs, which has stopped them hunting deer. <i>Continual improvement - Development of a legal register covering all requirements, not only the EIA License requirements (e.g. land use, groundwater abstraction volume and rate, protected species etc.).</i>
	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 At present no legal register is in place to assist Avalon in identifying all its legal obligations beyond compliance with the EIA and other license, annual permitting requirements and chemicals that are banned in Mauritius. Black River Gorges National Park is nearby to the west, but not immediately adjacent and downstream of the facility. To avoid impacts on known species, Avalon uses MSDS sheets to

			inform applications and obtains feedback from suppliers about changes in banned chemicals. They then discuss alternatives to future proposed banned substances with potential suppliers. High numbers of frogs (considered as ecological indicators) are present, but no formal surveys of species and populations are being considered. However, chemical application rates and the frequency thereof are considered to avoid and minimise affecting population numbers. <i>Continual improvement - Formally document biodiversity and landscape setting information, including any necessary active management measures required for priority species and habitats. This must include the additional knowledge acquired on the site after completion of the EIA.</i>
	N1.1.3 Understanding and respect for cultural heritage	Protect any archaeological, historical or cultural designations on the site	Avalon is not aware of any cultural heritage sites present. No historical features were identified in the EIA. The site falls within a Scenic Landscape Area, which was considered during the facilities architectural and landscaping design process. The Grand Bassin Hindu temple and associated sacred lake is located 2 km west of the facility. A public access that crosses the site is used by pilgrims during celebrations of Maha Shivaratree and Ganesh Chaturhi when converging to Grand Bassin for their festivities and religious devotion. Avalon upgraded the access by widening the road to 7m metres and tarring it for the benefit of the pilgrims. Resting facilities were also be provided at intervals.
N1.2 Opportunities to naturalise the course	N1.2.1 Measures taken to identify and minimise the required area of managed turfgrass	Observe, track and / or monitor golfer play	The natural areas around the water courses have been retained and invasive species removed, to protect the catchment value of the site. The course was designed as a family course, so the fairways are intentionally wide. Rough is cut, but not actively managed beyond that cutting. Fertilisers and herbicide applications only on greens and fairways. Fairways are tightened for competitions.

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	Known fauna species are based on superintendent's observations. Kestrels are known to occur in the National Park, but never observed on the course. No active management beyond no-go areas around the Palm specie.
N1.4 Conserve key species	N1.4.1 Practical conservation measures for priority species		A no-go area was instituted upon identification of the biodiversity importance of the Palm specie on site. To avoid impacts on known species, Avalon uses MSDS sheets to inform applications and obtains feedback from suppliers about changes in banned chemicals. They then discuss alternatives to future proposed banned substances with potential suppliers. A planting list is in place for residential areas of the facility (allowed and forbidden).
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 were changed to Bent (currently 95%) from Champion, that were grown in during initial development. Bent is better adapted to higher altitude because of the cooler temperatures. In retrospect, Champion was less optimal for initial planting, but have been adaptive since initial development. Tiff 419 (Cynodon) was planted for fairways during development, but Paspalum has taken over and allowed to grow in as better adapted. Paspalum is pest prone, but Avalon is managing this via keeping it as healthy as possible. Paspalum is being fertilised. Growing season is from November (200kg/ha applied 3 times since October 2019, and will be applied 1 more time before winter, with added Potassium). During winter, they get some rain, but it is cold and overcast, so isn't conducive to growth. During winter they don't focus on course condition, as its not optimal to apply fertilisers. Cynodon draws back in winter, so Paspalum expands each

			season during the winter.
	N2.1.2 Practices to maintain good soil structure and condition		Agronomist appointed during design process to inform soil management and turf selection. Soil tests now undertaken at least 1/year, but generally 2/year. Applying magnicite, to break down the high clay content, to make soil more loamy and enable root development. Also using a soil specialist, to inform soil health and adaptive management. Previously was sugar cane, and soil was very poor due to bad management. Applied NPK fertiliser, plus additional supporting elements. Previously applied foliar feed, but recognised they needed a more focussed approach.
	N2.1.3 Careful and responsible fertiliser application throughout the year to avoid over-fertilisation	Undertake soil tests and nutrient analysis	Fertilizer rates inputted into OnCourse. As above. During winter, applied foliar urea (50kg/ha) and magnesium sulfate, if spot spraying is necessary for dollar spot. Dollar spot starts at high elevations, as temperature drops from top down in winter, and then climbs back up in spring. They apply urea progressively, but via spot spraying only. Fertiliser rate (200kg/ha) is applied more frequently but at lower rate than recommended (350kg/ha), due to high rainfall events resulting in loss. Avalon has a lower budget than other courses on Mauritius, but they believe they are working effectively within the financial constraints
N2.2 Prioritise cultural management	N2.2.1 Non-chemical pest, disease and weed management	Sharpen mowing blades; Remove surface moisture; Hand weeding	Weeds removed by hand. Using a bio-cure (Tricoderma) that coats the pest, infects pests as it moves, and then kills pests (fungus). They are currently testing it at one tee, but they may also be killing beneficial insects (e.g. earthworms, bees etc.), so are applying it

			with caution particularly during this pilot phase.
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	A register of all chemicals applied on the course are logged in OnCourse. Visual pest and disease detection is undertaken daily. Undertook an inventory of past herbicide, fungicide and pesticide application. When adjacent sugarcane is harvested (2/year), they have the greatest pest invasions. So they plan for these events and respond accordingly. Avalon undertake internal training and constantly remind staff to undertake visual inspections. Current application rates have been effective. Apply Coragen (3-month window) on greens, but it is very expensive. Wish to apply it on tees, but due to cost have not done so to date. They will be cutting back on staff in February 2020, so may need to apply it to tees then too.
	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	Operators wear spray suits, gloves and masks to meet the Mauritian requirements. Filters are changed every 4-8 weeks. Spot spray for weeds, using masks, spray suit and gloves. No formal qualifications required for application, but the appropriate staff are provided with on-site training. Avalon is not aware of any chemical application training courses in Mauritius. Calibration undertaken monthly on spray rig. Containers are punctured and disposed of with all other waste. Remaining product is applied on the course, not brought back to the maintenance facility. Do a daily calculation for spraying volumes, to ensure they only mix what is required per day. For napsack spraying, smaller volumes are used, so they just mix what would need for the final

			spray of the day. All greens treated equally. Tees and fairways are spot spray for targeted application. Application on rough: blanket application for weeds – approx. 3/year. Spot spray for insects. No application for fungus. Fertiliser 2/year.
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.	Water quality testing for whole facility every 6 months, and monthly for select specific locations. Fertilizer and all other chemicals (excluding fuel) stored neatly in a specifically designated store rooms at maintenance facility (including an extractor fan for the chemical store). Golf course chemical store is bunded, to enable clean up without pollution. Chemical store for clubhouse (located at the maintenance facility) is not bunded yet. Diesel is stored in an above ground storage tank (bowser) that is bunded, but bunding has cracked. Petrol is stored in a designation storage cage, but isn't bunded. Capacity of the grease trap to capture all of a potential fuel spill from an oil drum from the fuel storage cage is unknown. No documented spill procedure in place beyond spills contained with bunded stores. Currently implement uniform mowing and chemical application across the course – not currently influenced by ecological features and associated understanding (so no buffers for spraying around water features at present). <i>Continual improvement – Identify and implement no spray buffer zones around water features.</i>
	N3.1.2 Practical measures to ensure pollution risks are	Ensure all hazardous materials are safely and securely stored; Ensure compliance with all required	Chemical store for course (bunded) is locked and mechanic keeps key. Extraction fan present within store.

	minimised from clubhouse operations	standards and systems for hazardous waste and wastewater discharge	Currently not being disposed of at hazardous waste site. Refuse collected by Municipality. Wastewater disposed of via septic tank and soakaway as per the EIA License.
	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	Mixing is taking place in the wash bay, which has a grease trap. The wash area is impermeable. Rashan of Avalon is responsible for cleaning of the grease trap. However, they are not currently sure of the final disposal site for waste removed from the grease trap. Continual improvement - Install bunding for the fuel storage facility and clubhouse chemical storage facility. Repair cracks to bunding of the 30,000l diesel above ground fuel storage tank at the maintenance facility and ensure integrity is fully rectified. Determine the capacity of the grease trap at the maintenance facility and its suitability should a spill occur from one of the storage facilities (e.g. spill of all of a 200l fuel drum). Upgrade the capacity of the grease trap should it be insufficient. Consider installing a chemical wash shower in close proximity to the chemical store (this extends beyond the requirements of the GEO Certified standard, but would be a highly responsible practice).
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;	Fuel storage for diesel is via a 30,000 l above ground storage tank (bowser) with bunding, fire extinguisher etc., but the bunding is cracked. 200 l drum for petrol storage and 200 l oil drum (4 stroke) in storage area away from the workshop to avoid potential sparking risk. Drum for oil. Few 2 stroke machines are used, with such oil kept in the store too. Ventilated by a grate, but not an extractor. Currently not bunded in any way. Fire extinguishers in the workshop area, which is in 10m of the

		Regular inspection of storage tanks	fuel store. Avalon are not aware of where contaminated soil gets disposed of. Any eye rinse tap is in place and has been used. The patient is then sent to hospital. They have showers nearby in the event of a major exposure incident, but not a formal emergency wash shower. If an incident occurs, they apply first aid on site and then send the patient to a medical facility. The diesel AST is inspected as per law, which is approx. every 2 years. <i>Continual improvement - Future disposal of all hazardous material (including hazardous storage containers and potentially contaminated soil) at the new hazardous waste facility in Mauritius, including receipts confirming appropriate disposal by the service provider/s.</i> <i>Provide emergency spill response procedures and spill containment kits and provide training for their use.</i>
N3.3 Responsibly manage waste / storm water	N3.3.1 Appropriate waste water usage and discharge licences	Wastewater discharge licence; Appropriate treatment of machinery wash water (impermeable surface, oil / grease / clipping separation)	All effluent enters soak-aways as per EIA license. See section above on the wash bay.

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	Greens watered if there has been 3 or more days of sunshine and no rain. Receive more than 200 rain days per year on average. From April to October they get orographic rain, outside of the wet season due to the local microclimate. In 2018, had 1,000 mm in 1-day from a cyclone. But course is well drained, so this wasn't problematic. Tees and fairways are only irrigated when fertiliser is applied, but they try to fertilise during rainfall events. Irrigation system: Grundfos pumps at each pump station. 9.5 bar and 12 bar for lower lying pump station. Irrigation all run off satellites. No automated irrigation linked to a rain gauge. But Greg's assistant lives near the course, so they turn the irrigation off if/when it is not required.
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	Every 3-4 times per year they check and cleaning of irrigation systems. Not using soil moisture sensors, just consider the number of sunshine days experienced before they switch on the irrigation and then they only irrigate the 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	Clubhouse uses borehole water, including for drinking water. Treatment via chlorination of 2x 500m³ tanks with filtration at treatment plant. Daily using 10-13 m³ of water. November and December usage are highest due to increased guests and functions. CWA (government water board) controls borehole water use and bills Avalon monthly. Water Quality Analysis is undertaken independently by SGS, and then also by government. Avalon take daily and monthly readings, separately for different

			meters for the maintenance facility, clubhouse, etc. Kitchen water use isn't known. Washing water of vegetables is recycled and then used for washing of loading bay area. A hose is used for washing in the kitchen. A washing machine is used for cleaning of glasses, plates etc. Large pans etc washed by hand as they are too large. Clubhouse: Reduced quantities of chemicals for cleaning, including biodegradable and eco-friendly products for cleaning. Focus on leak detection and rectification, to reduce water costs, and they keep replacement stock (e.g. pipes) on site to minimise repair times. <i>Continual improvement – tracking water consumption in the kitchen and separate areas of facility</i>
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	Property was purchased with a permit for water abstraction, as per previous sugarcane production. No knowledge at present of permitted abstraction rates. Problems with pumps was addressed by directing water directly into ponds without pumping.
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	Greens and tees mowed daily. Summer: fairways 3 times week, but 2 times per week in winter. Green surrounds: Summer daily. Winter 3 times per week Rough: 1 per week. Tee surrounds: 2 per week in summer, 1 time per week in winter. Bunkers: Fly mow 1 per week in summer and every 2 weeks in winter. Green collars: Cut 3 times per week summer, 2 times per week

			in winter. No additional naturalisation has been implemented since the course was built. They have added more gardens around the tees, which was previously grasses. No irrigation of landscaped areas. For residential homes, gardens are watered during establishment, but there is no need thereafter. The only low moisture stress periods are November and December before arrival of the wet season.
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	Kitchen: Cook with gas, except for microwave. Lighting, fridge etc. all off electricity. Undertake a daily meter reading. Chef monitors the number of likely guests/occupancy, to inform what appliances are needed – so they aren't heated up when there is no need. High use experienced during events and weekends. Currently taking daily electricity meter reading for all appliances/facilities (e.g. different floors of clubhouse, restaurant, offices, pool etc.) and to inform impact of electricity car chargers installed 2 months ago that will be active in 1 weeks' time. Installed a solar system to power the cars. Records provided. Previously took monthly electricity meter readings. Also undertake a DB test twice a month. Installed surge protectors against impact of lightening.
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	Installed PV for electric car charging stations, which will be charged to users in the future. Current proposal to install PV at maintenance facility, which is viewed as a long-term return. Avalon has obtained a quotation for different PV installation options and the head of finance has approved implementation. Correspondence confirming this was viewed. Also working with CEB (Government Electricity Company) for

			Avalon to install PV panels to use renewable energy generated on site and feed excess electricity back into the grid.
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	Use glass bottles for serving drinks and on course. Removed plastic bottles completed, except for 1.5l bottles to serve still and sparkling water from. Also installed a water dispenser adjacent to pro shop in the clubhouse. New members/visitors receive a complementary glass bottle at first use, but golfers are required to buy a bottle thereafter if they break or lose it. Food and Beverage: Most goods are received in plastic, but some suppliers are using recycled materials. Some received in boxes. Boxes can't be kept in the chill room, so are stored outside in a bin in a storage area, but tend to get wet due to rainfall. Housekeeping collects all separated waste (paper/boxes, plastic, glass bottles) every 2nd day. This is the collected for recycling, but typically boxes aren't recycled because of being wet. Vegetative food waste is taken for use as animal feed by Avalon's venison (deer meat) provider. Use recycled paper straws. Take-away boxes are all paper based. Clubhouse: Waste is sorted on site (not initial separation). Plastics then collected for recycling. Non-vegetative/other food waste and other organics go to the maintenance facility for composting. Avalon has had rusty iron removed twice for recycling since opening.
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	Food and Beverage purchasing: Suppliers have to produce certificates for food hygiene (HSSCP). They consider recycled materials and quality of produce. They have a demand for Halaal food, so need certified products. Use established, trusted suppliers.

			Use a vegetable provider in Mahebourg. Focus is on food quality and safety. Venison is sourced from immediately adjacent neighbour. Flowers are sourced from local suppliers in immediate vicinity. No explicitly local sourcing policy. Quality, quantity and reliability is a challenge to sole local sourcing. Clubhouse: Don't purchased concentrated chemical products, to minimise potential exposure related health impacts on staff.
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	Waste is transferred via a private lorry to a facility at La Brasserie with a receipt provided from the registered facility of the weight of the waste delivered. Plastic collections by a separate waste collection and recycling company, on a needs basis. No separation at source, but immediately after on site. Paper not currently being recycled because of the challenge of it becoming wet. Food and Beverage: Soft drinks are sourced in glass or cans as much as possible, but Coca Cola and Pepsi haven't phased out plastic yet, but government requiring this by 2022. Been offering cocktails and associated health drinks as alternatives to soft drinks. National move to healthy food and trying to serve healthy, natural (unprocessed) food. This is well reflected on their menu.

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	Chemicals are being changed where possible. Previously used Demaflo to clean ice scoop etc., now using EcoSun that is a biodegradable product. Introduced live plants into the restaurant, to eliminate the daily need for daily fresh flowers/plants. Chemicals are largely provided by a single supplier. Containers for these chemicals are returned to the supplier for re-use. Rest are sent to landfill, but not to a hazardous facility where relevant.
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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		Golf, football pitch (used by staff and visitors and village team), tennis courts, foosball (bubble soccer), snooker, children's climbing equipment and slide, table tennis, volleyball and patang (large marbles) also available within the facility. There was a forest walk, but it got washed away and Avalon are planning a short and more resilient route. There facilities are by residents, visitors for golf and dining, and the (nearby) village football team. Avalon is busy staffing a gym and purchasing equipment, but it will likely only be available to members. The swimming pool immediately adjacent to the clubhouse is only for use by members and groups undertaking team building. Social events include lunch for handicapped individuals (after opening). Also provide financial support for food for pilgrims on annual pilgrimage to the Hindu temple site next to the National Park.

C1.2 Provide for volunteering and charity	C1.2.1 Opportunities available for volunteering and support of charities and good causes		Avalon provides Rashan and other staff to assist the nearby villages of La Flora, Grand Bois and La Brassierrie to assist with village clean-up. Waste is disposed of by the District Council. This is being undertaken 4 times per year. Requested by District Council to cut grass at La Flora, Grand Bois and La Brassierrie villages. Agreed to cut grass monthly, which was implemented from March 2019, and also involved in maintenance of football ground at La Brassierrie and Grand Bois and repair of football pitch at La Flora. Avalon set up a water and juice station for pilgrims to the Hindu temple site next to National Park. Avalon works with 2 organisations, the Mauritius Golf Federation for underprivileged children and the AfroAsia Foundation, whom Avalon pays for tuition of learners. 10 learners from Esperance school (underprivileged with learning disabilities) brought to be taught golf 2 hours weekly, and the 2 best (golf and academics combined) each year are invited to continue at Tigre (the private golf academy on the estate). Avalon provides coaching and access to the facilities and AfroAsia bank provide clothing and transport etc. for them. Golf for all with MGF involved 10 kids every Saturday from various schools for a period of 3-4 years each. Participants are selected from towns/villages in the centre of the island where Avalon is located. Participants generally start playing tournaments after 1st year. Private coaching is provided via the academy. Avalon partners with charities (e.g. RoundTable) at reduced rates to use the facility, as a fundraiser for learner golfer development. They also hold an event (breakfast and golf) as a fundraiser for mothers that are drug addicts and need support for their families whilst they go to rehabilitation.

			Also held a fundraiser for a cancer patient needing international treatment. Ad hoc contributions are made to the District Council for various events (school activities, etc.). Avalon's total corporate social responsibility commitment to the Mauritius Golf Association is MUR 2 million in the form of in-kind use of Avalon's facilities. MGF has a strong focus on underprivileged players, which Avalon strongly supports. An annual trail run is held that passes through the 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'	Avalon hold meetings with religious and sports organisations. They support a local football tournament by providing drinking water. For Independence Day celebrations they sponsor refreshments. Been requested to assist with maintenance of a new government-built social activities building in La Brassierrie, but Avalon has not decided yet whether they will assist. They are busy developing an internal policy to enable them to effectively and consistently respond to requests for support from government. Focus will likely be on sport and activity/fitness/health.
C2 Golfers & Employees			
C2.1 Improve health and wellbeing	C2.1.1 Benefits to human physical and mental health from golf and facility activities		Lunch provided for all staff, but this is not practical for maintenance staff as the maintenance facility is too far away from the clubhouse. Board games provided at lunch time for all staff. Staff get free access to the course. In-house pros were providing coaching 1 hour per week (in off-season) to all staff. In-house par 3 tournament provided for maintenance staff. Established an Avalon golf group to provide ongoing coaching to staff, focussed

			on those who want to play. Clubhouse staff typically don't play golf and have shown a major interest. A health and safety committee meeting is held quarterly, including the HoDs and a staff representative to discuss human resource issues, including concerns/incidents. A football match is held every Wednesday by staff and other interested locals. Mainly played by maintenance team, but also some clubhouse staff. The staff golf team is encouraged to play during work hours, to meet with members. Gym on site will likely only be for members.
C2.2 Be open and inclusive	C2.2.1 Inclusivity and diversity in membership and visitor policies	Demonstrate inclusive policies for members and visitors	Membership application process only considers whether currently a golf is suspended/banned by the MGF. Golf is member-based, but various visitor types are provided for (guests from other hotels, team building groups, lunch guests etc.). The clubhouse is open to all visitors, unless a function is taking place. Members get certain preferential benefits (specials, reduced green fees etc.)
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	Employment policy is based purely on legal requirements, and Avalon favours local employment from adjacent villages. Initial interviews are held with the relevant HoD, followed by submission of an interview recommendation form to the Club Manager and HR. After appointment, induction training is provided on Avalon's vision, mission and values. They seek to create a fair, professional, ethical, hard-working, positive work environment in the clubhouse.

			Various H&S requirements include training every 3 months (e.g. chemical use, fire extinguishers use, use of masks, avoidance of hot surfaces etc.) Only 1 very minor accident has taken place to date in the clubhouse. 22 local leave days and 15 sick days are the legal requirements. All staff in the clubhouse (excluding waitrons) are made permanent employees after a 3 month probation period. Training is held for each department and training hours are recorded. This includes on-the-job training by HoDs and externally by SDI training. This includes First Aid training etc. Logs seen of training provided.
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	Interaction with members is directly via monthly newsletter (golfers and homeowners), newsletter is duplicated on Avalon's website, telephonically, via email, on-site posters, social media (Facebook is huge in Mauritius, but they also use Instagram, Twitter). Whatsapp has been very effective for interaction with members, but one-on-one messages are sent to all members, not via a group. Occasional articles are printed in local newspapers and international magazines (e.g. wedding venue promotion). IAGTO (International Associated of Golf Tour Operators) is engaged to communicate key marketing messages (European market primarily), e.g. if Avalon were to achieve GEO Facility Certification. The estate is split into units for Mauritians and Foreigners. New projects and initiatives are communicated via email, Facebook, and at the Pro Shop (e.g. glass bottles replacing plastic bottles).
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	Talks are held with key community groups on days when they collect waste in villages. A newsletter is used to communicate key messages, such as sustainability issues (e.g. removing 15,000 plastic bottles from the facility, to use glass instead).

			Golf Fundraisers, international music concerts, functions (Christmas, New Years, Valentines events) are held.
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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