

GEO Foundation - M&E Public System Report

Version 3 – June 2019

Introduction

GEO Foundation (GEO) is a non-profit organisation dedicated to driving sustainability in and through golf. GEO has collaboratively developed a suite of three Voluntary Sustainability Standards for the golf industry (Tournaments, Developments, and Facilities) each of which is linked to a certification scheme. The Standards are linked to a specially developed web application, OnCourse, which captures data, practices, and examples of work from participating golf clubs.

GEO is continuously improving the use of this information to accurately measure and report golf's sustainability value and progress, and to evaluate the impact of the scheme. This report offers an overview of the current system that GEO Foundation has in place for the Monitoring and Evaluation (M&E) of the programme, its effects, both intended and unintended, trends, and progress made towards desired impacts. The M&E system is continuously improving and developing, and the report also describes future additions to it.

Scope and Boundaries of the M&E System

Initially, the scope of the M&E System was performance monitoring directly linked to the scope of the GEO Standard. Monitoring of the standard focusses on reach indicators, such as number of courses enrolled and those active, number of courses certified and recertified, geographic location, etc. Monitoring also includes case studies on practical activities and outcomes of actions at individual golf facility level (e.g. integrated pest management programmes, water capture, pesticide application reduction, recycling, community programmes, etc.).

Although the focus has mainly been on performance monitoring, GEO's M&E is continuously developing into a robust and credible system. Over the past years, a lot of work has been done relating to data and metrics, reporting, and evaluation. Key progress in the last 2 years has included:

- During 2016, GEO started an ambitious upgrade of the OnCourse® programme, and with the finalisation of OnCourse version 4 (OCv4) at the end of 2017, the technological capacity for large-scale data collection from golf clubs around the world is in place. The new version of the programme is more robust and ensures more consistency in data capture. This makes it more relevant and easier for golf facilities to report consistently on their actions and creates a strong foundation for impact evaluation and reporting.
- A Sustainability Reporting for Golf framework has been developed, which will expand the range of outcome and impact evaluations, including annual National and International Sustainability Reviews. When a critical mass of facilities participating in a country has been reached, National Reports will be produced. The sample set for this is 30% of golf facilities in a country using OnCourse. This has already been achieved in some countries, such as The Netherlands, and pilot National Reports are one of the priority steps in further developing the M&E system during 2019.
- In 2018 and 2019 extensive stakeholder consultation took place on the metrics used by GEO and the industry to measure outcomes and impact, as well as intended and unintended effects. This consultation was part of the revision of the standard for Golf Facilities Management and the Sustainability Reporting for Golf project. This has led to a set of Key Performance Indicators (KPIs), which will form the basis of future reporting, monitoring, and evaluation.
- In 2018, GEO conducted a first outcome evaluation study, based on in-depth interviews with participants in the scheme. Due to a small sample size, the evaluation is not highly representative, and therefore has not been publicised, but it is an important learning step in GEO's M&E development.

Future expansion of the M&E system will allow thematic data sets (e.g. regional climatic conditions, carbon calculators, irrigation tools, pesticide tools) to be electronically aligned with data inputted by golf facilities and the GEO Verifiers, to enable automated cross-checking of data. This will allow the issues defined in the

M&E framework to be evaluated in more depth and assumed causal pathways to be tested more robustly. GEO and the industry stakeholders will be able to move to increasingly in-depth and wider analyses.

Defining the Intended Change

GEO's vision is 'for golf facilities to maximise their environmental and social contributions for a positive net impact' (see Appendix 1: GEO's Critical Pathways to Impact diagram). GEO's strategy to achieve this is through support, guidance, advocacy and the GEO OnCourse® programme available to support improvements in golf facility's operations worldwide and that can lead to third party certification (GEO Certified®).

GEO and industry stakeholders have framed a practical agenda of intended sustainability impacts for golf, the 'Sustainable Golf Agenda' of intended change, which cover three main themes (nature, resources, community) and nine action areas: habitats & biodiversity, turfgrass management, pollution prevention, water, energy, materials, outreach, golfers & employees, and communications. The 'Sustainable Golf Agenda' aligns directly with the Standard for golf facilities, and is measured and monitored in the OnCourse® programme, to ensure strength of data and reporting capabilities across golf's impact areas.

Performance Monitoring

Performance monitoring is focused on relevancy and demand of the OnCourse® programme: registrations, active users, geography, facility type, certification and recertification. These are monitored by the GEO team, reported on a monthly basis to senior staff and the board, and used to inform strategy and further developments and improvements of the system.

Unintended effects of the standard are monitored and recorded by GEO Certification Ltd. and the GEO Auditor network, and included in the monthly reports to the GEO Senior Management Team. These include:

- Complacency among golf facilities.
Mitigation: Utilisation of continual improvement targets and 3-year cycle for re-certification.
- Overstatements or manipulation of data to demonstrate desirable trends made by ecolabel holder (data quality).
Mitigation: Utilisation of transparent reporting of both facility and verifier reports providing information on what actually has been accomplished by the ecolabel holder. (E.g. Peer verification and Advisory Council of GEOSA's reports, complaints and appeals and media claims tracking (see GEO Standard Monitoring Procedures).
- Cost of compliance is seen to be too high.
Mitigation: Provide suggestions on possible funding sources for clubs as well as cost effective ways to implement standards.
- Clubs not participating don't have an incentive to implement sustainable golf practices.
Mitigation: Communicate the business case for sustainable golf practices and provide clear, practical ways any club can implement practices. Work with local partners in specific territories to improve understanding of sustainability.

Through performance monitoring, GEO also attempts to uncover positive unintended effects, which is most easily achieved through conversation with participating golf clubs and verifiers. Many positive unintended effects are specific to the context of a particular golf club, but widespread effect will be incorporated into the theory once their causal pathway has been investigated and can be contributed to the standard implementation.

Finally, GEO keeps track of additional external factors influencing the effects of the standard, for example climate shocks impacting resilience and government policy impacting operations of facilities and their supply chains. Close cooperation with national and regional partners (e.g. Golf Federations) is key to monitoring and understanding the effects of these kind of factors.

Outcome and Impact Evaluation

The Standard for golf facilities has been operational under the ISEAL Impacts Code since 2015. After a one-year extension was granted, GEO conducted its first outcome evaluation in 2018, which was a small-scale, qualitative study, based on in-depth interviews with greenkeeping staff at GEO certified facilities. Expanding the frequency and scope of outcome and impact evaluations is a priority, and OnCourse® v4 has been developed to enable a wider variety of reporting and impact evaluations, for example:

- Club level, regional, national, and international analysis and evaluation of outcomes and impact of GEO programmes.
- In-depth, thematic impact assessments through the integration of new tools and apps – e.g. carbon calculator, water budgeting, pesticide tool.

As OnCourse v4 has only been operational for one full year, increasing uptake is currently still the priority, and the database does not yet contain industry-wide samples of reliable data. However, discussions are underway in specific countries with high participation rates to define and identify funding and partners for the first national reports (i.e. sampled outcome evaluations). As uptake increases further, and the database grows, increasingly in-depth and representative (impact) evaluations will become possible, and will be conducted and/or commissioned by GEO.

Currently, some case studies are publicly available, which have been developed through analysis of OnCourse® certification (and if available) re-certification data. They reflect practical improvements that GEO's scheme has brought about in club facility activities and approaches across three themes (nature, resources, community). See: https://sustainable.golf/get_involved/real_results

Finally, an ongoing postgraduate study at the University of Wisconsin is analysing "The Environmental Sustainability of Golf Courses: Quantifying and Analyzing the Performance of Golf Course Systems", which will be a valuable piece of learning for GEO.

Improving the Effectiveness of the M&E System

As previously described, the M&E system is undergoing continuous development and improvement, as part of GEO's Sustainability Reporting for Golf project. With the updated OnCourse® v4 programme now in operation and ongoing consultation with stakeholders across golf, science and sustainability industries, the foundation has been laid to build an extensive database on golf facilities' sustainability practices and figures (across the three themes: nature, resources, community), and to conduct regular outcome and impact evaluations as part of an increasingly effective M&E system.

Effectiveness of the system is also improved through monitoring of OnCourse® activity occurs on a monthly basis. Reports are distributed to all staff and used by top management and the Board in consultation with the Advisory Council and other stakeholders if required, to inform changes to GEO programmes to increase uptake and impact.

Opportunities for Engagement

Stakeholder engagement in the design and revision of the M&E system occurs through outreach to specific groups, including a grassroots User Group, technical network of thematic experts, Advisory Group of high-level sustainability and golf experts, and a National Federation Steering Group. Some of the stakeholder organisations represented in these groups, and who have been involved in the development of the entire GEO programme, are

- R&A, IGF, USGA – golf's governing bodies
- Asian, European and American Turfgrass specialists (e.g. STERF, Asian Turfgrass Centre)
- Sustainability Consultants and Universities, NGOs (e.g. Birdlife, Buglife, WWF, AWS)
- Members of GEO's Advisory Council and various Expert Working Groups

Finally, although most engagement occurs through outreach from GEO, any interested party can contact us to get involved through the website link in the impacts area of GEO's website.

Roles and Responsibilities

Different functions and aspects of the M&E system are undertaken across the team, with the total time spent by each staff member estimated to amount to at least one full-time employee. Besides the GEO staff mentioned below, GEO works collaboratively with a variety of partners and stakeholders in all of its work.

- **Kelli Jerome – Managing Director** oversees the Monitoring and Evaluation Programme at GEO.
- **Michael Bekken – Project Scientist** is responsible for the development of programme tools, further integration of monitoring, evaluating and reporting capacity, a collaborative effort to set consistent and modern sustainability metrics for the golf industry, and development of carbon calculations for golf.
- **Robert Ewing – Credibility Manager**, has a strategic role in developing and communicating the M&E activities in line with ISEAL codes, industry best practices and in line with his role as Project Manager for Sustainability Reporting for Golf.
- **Richard Allison - Project Manager, GEO Certified®** (for subsidiary GEO Certification Ltd.), reviews the applications for GEO Certified®, ensures data integrity, works with the independent verifier network, and also monitors trends amongst facility reports.

For further information and enquiries, please contact Robert Ewing at robert@sustainable.golf

Appendix 1: GEO's Critical Pathways to Impact diagram

