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## PERCEPTION ABOUT THE APPLICATION OF ENVIRONMENTAL MANAGEMENT SYSTEMS AT GOLF COURSES IN SPAIN

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### Abstract

A wide variety of environmental management systems (EMSs) exist today that can be implemented at golf courses in Spain, yet their implementations are not known. The objective of this paper was to conduct an exploratory study to learn about the perception of the present state of EMS applications at Spanish golf courses. An exhaustive study was conducted using a multi-question paper-based survey that was given to the greenkeepers at 428 Spanish golf courses, and the survey achieved a 13.7% response rate. Greenkeepers are responsible for managing EMSs at 89% of Spanish golf courses. The EMSs that are known by most of them are ISO (International Organization for Standardization)-14001 (96%), Q-PLUS (83%), and GEO (Golf Environment Organization) (68%). Only two certifying bodies have made a policy of actively offering to implement their EMS: Q-PLUS (64%) and ISO-14001 (62%). The EMS implemented most at Spanish golf courses is ISO-14001, at 38%; ISO-14001 also attracts the most interest in being implemented, at 71%. The principal reason for not implementing any EMS is a lack of funding. The most important items for the Spanish greenkeepers among environmental elements normally utilised in EMSs are nature conservation (4.80), water resource management (4.80), and waste management (4.71). The conclusions are that only ISO-14001 is important, and the remainders are merely nominal. Nevertheless, Spanish golf courses possess significant interest in implementing an EMS, but economic considerations are a major constraint. Despite this, golf courses should inform society more about their environmental actions, which would result in greater effective reconciliation between golf courses and the environment.

**Keywords:** environmental management systems, golf courses, greenkeepers, perceptions, Spain

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