

Moving towards sustainable golf links through the GEO certification system, Ljunghusens golf club - SE

1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products

2. Key Approaches

- Integration

3. Experiences that can be exchanged

The measures necessary for (coastal) golf courses to lose their poor environmental reputation and gain a European accreditation that they are striving for sustainability.

4. Overview of the case

This case shows what measures a golf course is taking to become sustainable and the standards it has had to reach to gain a GEO certified status of excellence.

5. Context and Objectives

a) Context

There are an estimated 6,500 golf courses in Europe with over half in the UK. Many hundreds are coastal. Golf tourism is spreading rapidly and particularly in the Mediterranean with both Portugal and Spain boasting coastal courses with magnificent scenery. However, the development of courses comes at a great environmental cost. Their development entails clearing vegetation, cutting forests and other natural growth to create artificial landscapes. These activities can lead to land erosion and block the soil's ability to retain water. Golf courses also need large quantities of pesticides, fertilizers and herbicides which alter the fauna and flora further and can cause health problems among golfers, workers, and nearby residents. Unfortunately, these numerous problems are overlooked by developers who are often supported by governments due to the economic rewards from the sport. It is clear that coastal golf links are here to stay.

In order to try and drive the sport towards sustainability, Golf Environment Europe (GEO), a pan European initiative based in Scotland, is working to promote environmental sustainability in golf. It teed off in 1994 (known as Committed to Green) as a partnership project between the European Golf Association, R & A, European Tour and the European Commission. It has a certification system and approves golf courses that are achieving sustainability in the areas of Nature, Landscape & Heritage, Water, Turf, Waste, Energy, Education & Awareness and Management Planning.

One such golf course with a GEO Certified status for excellence is Ljunghusens Golf Club in southern Sweden (27 holes). It lies within a coastal nature reserve dominated by heathland. Part of the course is internationally and nationally recognized wetlands (10 ha.) Elsewhere there is rough ecological grassland (25 ha.), open water features (7 ha.) and heather and other dwarf shrub communities (33 ha.) all of national importance.

b) Objectives

Ljunghusen is aiming for an environmentally sustainable development in its activities and on its premises.

GEO is working to integrate the social, environmental and economic benefits of golf and sees its functions to provide an overview of environmental sustainability activities within the golf sector; set out an environmental management and accreditation system for European golf facilities; and provide guidance on the sustainable development of new golf courses.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

GEO Certified status is the hallmark that a golf course has made a commitment to take action, publicise their management practices and continuously improve.

b) ICZM tools

Ljunghusen has been working since 1994 with a long-term environmental plan, adopted in 2001 by the board. It included i.a. a commitment to provide golf playing facilities with a minimum of environmental impact, choosing techniques, materials and transports compatible with natural resources, energy and other non-renewable resources. It is accompanied by a full environmental programme which has environmental awareness for the members as a central point. The measures that have been taken include:

Nature: An inventory of the flora (377 spp.). Small bushes and trees are being removed at critical places by the members every year in order to maintain the biodiversity. A large part of the beaches, wetlands and water hazards are being restricted in spring and early summer in order to protect birds and amphibians. Nesting birds on the actual course are protected by fences. Habitat patches are being increased in size with connections between internal habitat patches. These are connected to patches of external habitats to create new habitat corridors.

Landscape and Culture: Highland cattle are used for grazing to keep the heathland free from shrubs.

Water: Groundwater from boreholes and harvested surface water is used for irrigation (25,000 m³/yr). To minimize irrigation needs, the system is fully computer controlled and modern sprinklers are used. Members and players are informed that a deep green colour is not necessary for good playing surfaces.

Turf maintenance: No alien grass species are used on the course. The ambition is to maintain all areas with low input of fertilizer and, since the 1980's, fertilizer use has been reduced by about 80%. Nitrogen (1380kg/yr), potassium (1000kg/yr) and phosphorus (280kg/yr) are applied to greens and tees but the fairways have not been fertilised since 1984. Pesticides are used only when necessary e.g. against fungus in autumn and winter on the greens. Occasionally herbicides are used on other playing surfaces. Insecticides are never used. When cutting greens, the groundsman are required to pick weeds as part of the job whilst grass clippings collected from mowing the greens is composted.

Waste management: Recycling has been introduced and all hazardous waste is taken care of separately.

Energy: Geothermal energy has replaced oil-heating by 90%. Diesel is used as opposed to petrol and electric golf buggies are driven. Sensors for lights, ventilation and other installations are also in operation.

Education: Board members and employees receive both formal and informal environmental education on all the above. The club has a close co-operation with local NGOs and since it is in a nature reserve there is very close co-operation with regional authorities.

Environmental management: As well as the Environmental Management Plan which is reviewed every year, walks on the course are arranged with local NGOS to look at the flora and fauna on the links. The club participates actively in the Swedish Golf Federation's environmental programmes.

7. Cost and resources

GEO certification costs €150 and is valid for three years although registration is free. Verification is €600 - €2000 depending on the scale of the site.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

Ljunghusen golf club has become the first golf course to win a GEO certification, in May 2009, and is one of three with such a certificate.

9. Success and Fail factors

The GEO verification report notes that the golf course has had a long and genuine interest and engagement in environmental work. It has strong leadership from the board and general manager. The club shows well performed adaptive management when it comes to fertilizers, irrigation and integrated pest management, although the latter could be improved when it comes to trying more biological pesticides. The energy saving programme has been going on for several years and the facility was a pioneer in this area which could be improved with the help of a professional energy advisor. The facility is communicating its environmental work to its members well.

10. Unforeseen outcomes

Golf is so lucrative and popular that many golf courses may not participate in the accreditation system since, for them, it would have no added value in terms of gaining more members.

11. Prepared by

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12. Verified by

It has not been possible to verify this case.

13. Sources

- Miljöpolicy Ljunghusens Golfklubb (undated) Ljunghusens Golfklubb (with English translation)
- www.golfenvirmenteuropa.org
- www.ljgk.se (Ljunghusens Golf Club website)