

Practice to be assessed and included in the Guidelines

**Number/code:** GOV9

**Title:** STADIUM ENVIRONMENTAL MANAGEMENT SYSTEM ACCORDING TO ISO14001 OR EMAS

**Guidelines section:**

<input checked="" type="checkbox"/>	Governance	<input type="checkbox"/>	Operational management
		<input type="checkbox"/>	<i>Context of the event</i>
		<input type="checkbox"/>	<i>Event</i>
		<input type="checkbox"/>	<i>Stadium management</i>
		<input type="checkbox"/>	<i>Procurement</i>
		<input type="checkbox"/>	<i>Mobility and logistics</i>

**Description:**

Operating a football stadium is energy intense, with floodlights and lighting systems, pitch aeration and under-soil heating, warm water for sanitary facilities and kitchens, and so on. Furthermore, there is an ongoing requirement, i.e. a stadium consumes heat and power even when there is no match. At a tournament, there is much to be done in between matches: preparatory work, turf maintenance and training sessions necessitate the consumption of energy. By comparison, many football stadiums are relatively quiet in between matches during a normal league season. Nevertheless, even then the facility continues to operate at least to a certain extent. The challenge is to ensure efficient and low-energy operation of the technical facilities both at peak periods and on an ongoing basis.

By taking action to increase energy efficiency, it is fully possible to realise the potential for comprehensive ecological and economic savings. Identifying these opportunities and implementing them over the long term is the primary objective of an environmental management system. Other benefits include a systematic and comprehensive analysis of a stadium's environmental performance, the introduction of environmental policies, and the development of targets and actions list with clearly defined priorities.

Internal procedures aimed at minimizing unnecessary prints, avoiding the use of colours if not necessary and all the possible questions related in particular to the means that support communication also fall within the Environmental management system.

More precisely, an Environmental management system (EMS) refers to the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organizational structure, planning and resources for developing, implementing and maintaining policy for environmental protection.

More formally, EMS is "a system and database which integrates procedures and processes for training of personnel, monitoring, summarizing, and reporting of specialized environmental performance information to internal and external stakeholders of a firm."

The most widely used standard on which an EMS is based is International Organization for Standardization (ISO) 14001:2015. Alternatives include the EU EMAS scheme. During FIFA Men World Cup 2006 in Germany was used the ÖKOPROFIT environmental management system as well.

### **Environmental benefits:**

An EMS does not in itself have any direct environmental impact as it is a management and monitoring tool aimed at fixing improvement targets and ensure periodical measurement of environmental performance. The adoption and implementation of improvement actions and measures aimed at lowering the overall environmental impact can lead to actual environmental benefits.

Examples:

- 1) FIFA Women World Cup Germany 2011: the organizing committee funded the adoption and implementation of an EMS in each one of the 8 stadiums hosting the World Cup's matches.

Through the adoption and implementation of the EMS, each stadium has undertaken some interventions aimed at improving its environmental impacts (e.g. energy and water efficiency improvement, pitch preservation etc.).

Overall, the adopted interventions will cause the following savings:

- 6.000.000 of kWh per annum
- 4.000 CO2 tons per annum.

### **Economic benefits:**

Costs related to the construction and application of an EMS are mostly derived from time and effort required to a series of key functions staff operators. Event organisers often hire external consultants to do the job.

However, the implementation of an EMS usually leads to energy, water and resources usage optimization and consequently, to costs savings as well. The peculiarity of these types of investments is the medium/long payback period required.

Examples:

- 1) FIFA Women World Cup Germany 2011: the adoption of an EMS in all the engaged stadiums as well as the abovementioned energy and water efficiency measures, required an overall investment of **710.000 euros**.

However, they have also foreseen that **80% of the measures implemented will pay back within three years**. Only 20% will be amortised over a period of longer than three years.

### **Applicability and replicability potential**

Every stadium could adopt an EMS and work on improving its overall energy, water and resources consumption. If well implemented, it could also grant significant economic benefits in the long run.

During FIFA World Men Cup 2006 stadiums without certification have also integrated environmental management into their everyday operations.

**Source**

[Fifa Women World Cup Germany 2011](#) (p. 22 – 23)

[French Ministry of Sports](#) (p. 6-26)

[FIFA Men World Cup Germany 2006](#) (p. 12, p. 39-40)