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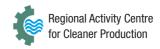
Good Housekeeping
Practices
in Hotels

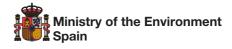
## CLEANER production

Regional Activity Centre for Cleaner Production (RAC/CP)
Mediterranean Action Plan











# Good Housekeeping Practices in Hotels

Regional Activity Centre for Cleaner Production (RAC/CP)
Mediterranean Action Plan











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#### 1. INTRODUCTION

#### 1.1. INTRODUCTION

The study carried out and the writing of this manual are elements of a wider framework: the constant desire on the part of the Mediterranean countries to reduce the environmental impact caused by tourism, above all in coastal areas, and the idea of promoting sustainable tourism. The guide effectively complements the "Mediterranean Strategy for Sustainable Development", adopted by all of the Mediterranean states at the 14th meeting of the Contracting Parties to the Barcelona Convention, held in Portoroz, Slovenia, in November 2005.

The signatory countries undertake in the abovementioned document to work towards sustainable development in seven priority areas. One of these seven areas is specifically the promotion of sustainable tourism.

According to the indications of the Strategy, the Mediterranean zone is a leader in tourism, particularly of a seasonal and coastal nature, which generates a great deal of employment and wealth.

The intense competition between different destinations has led to a certain amount of standardisation of hotel premises, leading to a loss of quality in some cases, brought about by public policies emphasising the construction of infrastructure over the contribution of added value from the cultural and social diversity of the Mediterranean.

According to the indications of the Mediterranean Strategy for Sustainable Development, some 637 million tourists are expected in the year 2025, that is, 270 million more than in the year 2000. Approximately half of these tourists will be accommodated in the coastal zone. As a result, it is imperative that cultural-rural tourism be encouraged, which would favour the inland areas, environmental concerns and the protection of the coast and historical and cultural sites.

Along these lines, the Strategy proposes three areas for action:

- Reducing the adverse territorial and environmental impacts of tourism.
- Promoting the provision of sustainable tourism installations and the increase of the added value from tourism received by local communities.
- Improving legislation for sustainable tourism.<sup>1</sup>

This manual is the result of a preliminary study commissioned by the Department of the Environment and Housing of the Government of Catalonia and carried out in two stages, consisting of research into the possible implementation of a Programme of Good Housekeeping Practices in hotels, based on a series of training and communication actions, and their later application in the form of a pilot project in three Catalan hotels.

The Programme of Good Housekeeping Practices for Hotels is an awareness-raising programme that aims to improve the habits of hotel staff and suppliers, along with those of their clients. With this objective in mind, two basic instruments have been designed: a training plan for hotel employees and

<sup>&</sup>lt;sup>1</sup> "Mediterranean Strategy for Sustainable Development", adopted by all of the Mediterranean states at the 14th meeting of the Contracting Parties to the Barcelona Convention, held in Portoroz, Slovenia, in November 2005, printed by Kontorousis Bros, Athens, 2006, pages 17-18.

a communication plan intended for hotel staff, along with hotel guests, suppliers and any other interested party.

We would like to thank the hotels Alimara in Barcelona, Medes in L'Estartit and Ca l'Eudald in Alp for their collaboration and the collaboration of their staff, whose contribution made this Manual possible. We would also like to thank the Department of the Environment and Housing of the Government of Catalonia for allowing us to share their experience in the Mediterranean region.

#### 1.2. OBJECTIVES AND STRUCTURE OF THE MANUAL

The main area of action of the Regional Activity Centre for Cleaner Production is the production process of different industries and it tries to bring "cleaner" environmental alternatives to small and medium enterprises. In recent meetings of both, National Focal Points and the Contracting Parties, one of the main recommendations to the centre has been to widen its field of action to other areas of interest, thus, in the coming two-year period, 2006-2007, the RAC/CP has decided to broaden its area of action and to carry out activities in the areas of the services sector, products (at all stages of their life cycle) and agriculture.

This Guide to Good Housekeeping Practices in the Hotel sector is the second in a series of Guides and Manuals that the Centre plans to produce in the services sector and that began with the publication of the Guide to Good Housekeeping Practices in the Office Sector.

The guide provides a simple, tried and tested explanation of how to implement a Programme of Good Housekeeping Practices in hotels and what the conditions and requirements to take into consideration for its application should be.

The guide is divided into five chapters. A brief description of the content of each of these is given below:

#### **Chapter 1: Introduction**

This chapter provides the background to the way the guide was produced, its objectives and structure and a brief reiteration of the concept of sustainable tourism and its historical background.

#### Chapter 2: Sustainable development and the company

This chapter outlines the relationship between the company and sustainable development, which translates as the obligations and benefits for the company. An explanation is then given of the way in which this relationship manifests itself, through eco-labels and environmental management systems.

#### **Chapter 3: Programme of Good Housekeeping Practices in Hotels**

The application of a Programme of Good Housekeeping Practices in Hotels is presented in this chapter, including the objectives of this method and the details of its structure, explaining the necessary steps for it to be carried out.

#### **Chapter 4: Good Housekeeping Practices**

This chapter contains the details of several examples of good housekeeping practices, classified according to the different departments in a hotel. General environmental subjects are also dealt with.

#### **Chapter 5: Indicators**

The last chapter provides a number of indicators enabling the evaluation and monitoring of the results obtained.

#### 1.3. SUSTAINABLE TOURISM: CONCEPT AND BACKGROUND

The impact of tourist activities on the environment is clear for all to see today; as a result, the planning of this activity to minimise such impacts on the environment has emerged as an unquestionable need. However, this has not always been the case. For many years, tourism development was scarcely planned and there was a total neglect of its environmental effects. Legislation regulating the tourism sector, sparse in any case, made no reference whatsoever to any type of tourist development, unless it destroyed the environment, and there was no environmental awareness among tourist agents or consumers. For this reason, it is of great importance that those countries where the hotel industry is developing, such as in the Eastern and a large proportion of the Southern Mediterranean, do not make the mistake of building up the coast to such an extent that they end up with the same problems as the more traditional tourist destination countries.

Concepts such as "sustainability" appear for the first time in a United Nations document from 1987, the Brundtland Report. Around 1991, Sustainable Tourism was defined as "tourism that maintains a balance between social, economic and environmental interests", at the 41<sup>st</sup> Conference of Scientific Experts in Tourism (AIEST, International Association of Scientific Experts in Tourism).<sup>2</sup> The conference in Rio de Janeiro in 1992 institutionalised the concept of "sustainable growth" and as a result produced a plan of action (Agenda 21) that firmly commits countries to the development of appropriate policies in order to attain sustainable development.

One year later, the "Euro-Mediterranean Conference on Tourism and Sustainable Development" was held in Hyères-les-Palmiers, France. With the challenge now clearly set out, the World Tourism Organization (WTO) established the fundamental points for the implementation of Agenda 21 in tourist destinations in 1994.<sup>3</sup>

In 1995, the First World Conference on Sustainable Tourism was held in Lanzarote. The "Charter for Sustainable Tourism" was drawn up at this conference. This charter states, among other things, that tourism should be based on criteria of sustainability. A recommendation was made by the Conference to state and regional governments to draw up urgent action plans for sustainable development applied to tourism.

In 1999 the WTO created a Global Code of Ethics for Tourism and in the same year, at the Eleventh Meeting of the Contracting Parties of the Barcelona Convention, held in Malta, the Greek and Spanish delegations presented a proposal for sustainable tourism in the Mediterranean Basin, which included a series of recommendations and lines of action for its conservation. In this vein, the Spanish representative considered it to be "...indispensable to integrate economic and environmental aspects and to implement guidelines in the tourist industry that are not environmentally aggressive and to correct the inadequacies of infrastructures created years ago..." <sup>4</sup>

In 2002, the "World Ecotourism Summit", organised by the WTO, took place in Quebec Canada. The same year was declared by the UN as "International Year of Ecotourism".

In 2003, the "First International Conference on Climate Change and Tourism" took place in Tunisia (Djerba, 9th - 11th April 2003).

In 2004, the "European Conference on Sustainability Certification of Tourism Activities" was held in the Czech Republic (Mariánské Lázně, 17<sup>th</sup> – 20<sup>th</sup> October).

Lastly, and as mentioned above, in June 2005 the Mediterranean Commission on Sustainable Development (MCSD) of the Mediterranean Action Plan (MAP) approved the "Mediterranean Strategy for Sustainable Development", which sets out a clear commitment to a type of tourism based on this

<sup>&</sup>lt;sup>2</sup> Further information at http://www.aiest.org/org/idt/idt\_aiest.nsf/

<sup>&</sup>lt;sup>3</sup> Further information on Sustainable Tourism and Agenda 21 at http://www.world-tourism.org/sustainable/conf/jeddah.htm

<sup>&</sup>lt;sup>4</sup> Mediterranean Action Plan, Final Report of the Eleventh Meeting of the Contracting Parties to the Barcelona Convention, Malta, page 7, 27th – 30th October 1999.

idea. This strategy was adopted by the Contracting Parties to the Barcelona Convention in Slovenia (Portoroz) in November 2005.

In accordance with these guidelines, the international, national, regional and local bodies of the Mediterranean should incorporate regulations, declarations and instruments allowing the sustainable development of tourist activities, due to their major growth in recent years and to the major impact that they can have on the environment. However, these actions by the Administration will not be enough if they do not have the firm collaboration of all parties involved.

Tourism depends on the surroundings in which it develops. Good environmental quality is therefore a key factor for its success. This statement is more and more evident due, on the one hand, tothe progressive environmental deterioration that certain tourist destinations have experienced and, on the other, to the increased environmental awareness of consumers of the offer of tourism. Tourists are more and more aware of the environmental aspects when choosing or repeating the place they select to spend a holiday.

The relationship between the environment and tourism is a complex one. It is clear that many of the activities generated by tourism can contribute to the destruction of the environment, in some cases irrevocably. But it is also clear that this impact can be reduced if there is a clear will on the part of business and consumers in the application of certain good housekeeping practices, such as those proposed in this manual for hotels.

Tourism has varied effects on the environment. Some are the result of the construction of the general infrastructures required by tourist activity, such as airports, roads, high voltage power lines, the extraction and transportation of water, etc. In other cases, these are infrastructures that are directly related to tourism, such as the construction of hotels, apartments, recreation areas, golf courses, marinas, etc. The transportation of tourists and the actual operation of tourist facilities increase and maintain the negative effects on the territory, something that is particularly problematic on the coast.

In the case of hotels, their relationship with sustainability should be permanent. From the planning and construction of the structures environmental factors such as, the visual impact that the building will have on the area or the appropriate land use should be considered. Then, once they are in operation, a hotel that aims to reach a balance with its environmental and cultural surrounding should include among its objectives a series of practices, which we will describe in this manual; these include the relationship between the correct use of resources, the controlled and responsible management of waste and respect for the local culture and biodiversity.

It is important not to forget that, if tourism is managed suitably complying with the principles of sustainable development, it can provide economic resources and raise the environmental awareness level of an area, contributing to the conservation of the environment.

The evolution of the development of tourism towards a model of sustainability therefore seems necessary. According to the World Tourism Organization in 1993, as can be seen in the document "Tourism, the year 2000 and beyond - Qualitative aspects", sustainable tourism is tourism that combines the needs of tourists and the areas themselves without compromising the possibilities of future generations. The aim is to manage resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining the cultural integrity, the ecological processes and the biological diversity of the territory.

This concept was extended by the WTO in August 2004, providing a more conceptual definition. In this sense, Sustainable Tourism should:

1) Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.

<sup>&</sup>lt;sup>5</sup> Blasco Lázaro, María, «Qué se entiende por turismo sostenible», First Conference on Sustainable Tourism, Aragon (2005).

- 2) Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
- 3) Ensure viable long-term economic operations, **providing socio-economic benefits to all stakeholders** that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation. <sup>6</sup>

Today, the concept of quality in the tourism sector is inseparable from respect for the environment and for the sustainability criteria. Hotels cannot remain removed from these trends, particularly considering the growing demand that exists in society in regard to environmental matters.

According to the figures provided by the "Mediterranean Strategy for Sustainable Development", the number of tourists in the Mediterranean will increase by more than 74% by 2025 in comparison to figures for the year 2000, and out of the total number of tourists, it is expected that approximately 318 million people will stay in coastal areas. With this scenario, the Strategy suggests the objectives of: "reducing the adverse territorial and environmental impacts of tourism, especially in existing coastal tourist areas; promoting sustainable tourism, which in turn reinforces social cohesion and cultural and economic development, enhances Mediterranean diversity and characteristics and strengthens synergies with other economic sectors, especially agriculture; increasing the added value of tourism for local communities and actors in developing countries; improving legislation for sustainable tourism."

Given the importance of the tourist industry and particularly of the hotel accommodation sector, the development of a programme of good housekeeping practices in this field is considered significant.

Nevertheless, the application of good housekeeping practices does not necessarily imply an increase in the costs of the hotel; on the contrary, it may bring savings, due to improved processes or the reduction of energy and waste costs, among other things.

Hotels, due to the characteristics of the service that they offer, have certain unique characteristics that do not apply to other enterprises. Basically, when considering t at whom the programme is aimed, in addition to the company owners, directors and other employees, we also need to consider the clients of the hotel as a basic element of the provision of services by the hotel.

It is to this end and taking into account the specific characteristics of the sector that this manual has been developed.

<sup>&</sup>lt;sup>6</sup> This definition is the one proposed by the WTO http://www.world-tourism.org/sustainable/esp/top/concepts.html

<sup>&</sup>lt;sup>7</sup> "Mediterranean Strategy for Sustainable Development", adopted by all of the Mediterranean countries at the 14th Meeting of the Contracting Parties to the Barcelona Convention, held in Portoroz, Slovenia, in November 2005 and printed by Kontorousis Bros, Athens 2006, pages 17-18.

#### 2. SUSTAINABLE DEVELOPMENT AND THE COMPANY

Every modern company should nowadays incorporate environmental protection criteria, an essential element for the general management of the business, within a general policy of corporate social responsibility and should assume its share of responsibility for environmental conservation and improvement. A company that is committed to the environment is a company that is committed to a society that is becoming more and more aware of environmental matters and that is beginning to demand conclusive action in this area from all economic stakeholders.

For companies, sustainable development denotes the creation of wealth whilst reducing the environmental impact of their activity. An increase in eco-efficiency is the main means of contribution by companies to sustainable development and is considered more and more to be a priority element in the design of business strategies.

Although the hotel industry is not among those that generate most visual impact on the surrounding area, this does not mean that a commitment to the environment and the incorporation of respectful environmental practices is not necessary, seeking to involve guests as a fundamental element of the process of service provision. On the other hand, this is an activity that affects large numbers of people in the host municipalities and these good practices will contribute to improved integration of these establishments into the territory better realations with their neighbours.

It is clear that the introduction of environmentally respectful management should take place progressively and its implementation should not involve costs that make the business non-viable; on the contrary, in the long-term, this process should result in costs savings, in addition to improving the company's image with its clients.

#### 2.1. ENVIRONMENTAL OBLIGATIONS AND RESPONSIBILITIES OF HOTEL COMPANIES

Environmental obligations and responsibilities emerge from the moment that humans realise that the environment in which they live is threatened and that regulation is necessary to avoid any potential danger. We are at a relatively early stage in this process, driven by a change in people's awareness, making us change consumerism and economic growth at any price, for a type of development that allows us to continue advancing in the future.

In response to society's request, public administrations have created a mandatory legal framework for companies, at state, regional and local levels.

A number of examples for the Mediterranean region are given below:

In **Spain** there are regulations made at four administrative levels: European Union legislation, basic State environmental legislation, environmental legislation in each autonomous community and also regulations made by local government bodies.<sup>8</sup>

A very similar situation can be seen in the other European Union countries, with community legislation combined with State legislation and Autonomous Community legislation, where such a system exists.

<sup>&</sup>lt;sup>8</sup> The example of Spain can be found at http://mediambient.gencat.net/cat/el\_departament/actuacions\_i\_serveis/legislacio

An example from the Mediterranean is the case of **Egypt**, which has made notable advances in this area since Law 4/1994 on the Preservation of the Environment was passed. This legal framework reformed existing environmental legislation, restructuring the Ministry of the Environment and creating the Egyptian Environmental Affairs Agency (EEAA), in addition to the Environmental Protection Fund. Among the priorities of the EEAA, through the Environmental Action Plan (1997-2002), was to urge companies to work within ISO 14000 standards, following criteria for recycling and environmental management in order to preserve nature.

In the case of **Turkey**, the action plan of the Turkish government is reflected in Turkey's vision of tourism for 2010, according to the speech made on 11<sup>th</sup> January 2004 in Istanbul by the Prime Minister **Recep Tayyip Erdoğan**. Among other things, he stated that "another important argument for our 2010 tourism vision is the concept of planned development as part of our perception of sustainability. We all know that in particular the preservation of the natural environment is essential for sustainable tourism." <sup>9</sup>

Over time and in accordance with their own possibilities, countries have incorporated different regulations that refer basically to the need to carry out environmental impact studies, the correct management of waste, the treatment of wastewater and the limitation of pollutant emissions.

Nevertheless, this manual focuses on those activities that hotels can carry out voluntarily, such as environmental management systems and above all good housekeeping practices.

#### 2.2. BUSINESS BENEFITS RESULTING FROM AN ENVIRONMENTAL POLICY

The environmental management of a hotel establishment or the application of a programme of good housekeeping practices is an opportunity to improve business and to make long-term economic savings.

The application of environmental criteria can result in the following advantages, among others:

- Reduction in energy costs.
- Reduction in waste disposal costs.
- Improved relations with the local community.
- Greater international competitiveness.
- Improved company image.
- Reduced monitoring costs.
- Reduced incident risk.
- Sales argument for a public that is more and more aware.
- Lower risk of legal complaints and penalties.
- Easier access to credit lines.

#### 2.3. COMPANY TAXATION

In line with the "polluter pays" principle, taxation is a means of internalising negative impacts on the environment resulting from the production-consumption process. The legislator, by applying taxes to emissions, increases the cost of polluting, forcing the producer to reduce it. The aim of such taxation is not punishment, but to allocate monetary value to environmental resources and their use.

http://www.kultur.gov.tr/EN/BelgeGoster.aspx?17A16AE30572D313F88F742D0D711251703CD59098841715

<sup>&</sup>lt;sup>9</sup> Full text in English at

The Organisation for Economic Cooperation and Development (OECD) differentiates two categories of environmental taxation:

- Taxation of use, related to the quantity of pollutant discharge, which charges the user of the service the costs of repairing the damage caused.
- Taxation of consumption, which seeks to act as a disincentive for the consumption of environmentally-damaging goods by increasing their costs.

Taking all of this into account, the business attitude of investing in order not to pollute is obviously more recommendable than paying for having polluted.

#### 2.4. ENVIRONMENTAL MANAGEMENT AND AUDIT SYSTEMS

Environmental management is intended to integrate those aspects that have, have had or could have an impact on the environment systematically into the company's general management. The aim is to conserve the environment, limit pollutant emissions and environmental risks and to guarantee safety in the workplace.

An environmental management system is built through environmental actions and management tools. These actions interact among themselves to attain a clearly-defined objective: environmental protection. An environmental management system provides a framework within which companies can develop their environmental policy by means of a permanent process of strategic planning, action, revision and improvement of the environmental action of a company.

In order to attain "Environmental Management System" certification, it is not necessary to fulfil strict consumption criteria, as is the case for eco-labels, because this certification refers to the "management" or operation of the company.

The steps to be taken to create an environmental management and audit system in a company include the following:

- The initial analysis and inventory of the environmental aspects related to the company's activities.
- An inventory of legal requirements.
- The planning of the management system.
- The programme of environmental action to attain the objectives set.
- Training and awareness-raising programmes for employees.
- System Implementation.
- Monitoring and internal auditing.
- Independent verification.
- Internal and external communication.

The management systems currently used are the EMAS (Eco-Management and Audit Scheme) at European Union level, and ISO Standards, particularly ISO 14001, at international level, the latter therefore applying to the entire Mediterranean region.

The European Union eco-management and audit system EMAS<sup>10</sup> is a voluntary environmental management and auditing scheme promoted by the European Union and applicable to service-providing companies such as hotels.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> http://www.europa.eu.int/comm/environment/emas/index\_en.htm

<sup>&</sup>lt;sup>11</sup> Regulation EC 761/2001 of 24th January 2001, DOCE L 114/1

EMAS is fully compatible with the international environmental management standard ISO 14001, which can also be applied to any organisation that wants to put into practice, maintain up to date and improve an environmental management system.

ISO 26000 Standard on social responsibility is currently being developed, a process in which representatives of the different sectors of interestare participating - at present, a total of 320 people from 55 countries and 26 international organisations. This task, which is expected to be finished by the end of 2008, aims to create a non-compulsory document setting out guidelines that will serve as help to organisations to operate in a way that is socially responsible. The guide is based on the idea that social responsibility is fundamental for the sustainability of all institutions. This guide to international standards on social responsibility, however, makes no claim to be a management system. Instead it will simply establish uniform concepts of social responsibility and will sketch out the best practices developed by initiatives of the public and private sector, without setting up parameters for certification. It will in turn be consistent with and complementary to the declarations and conventions of the United Nations. <sup>12</sup>

In the case of Spain, another applicable regulation is UNE 150101 EX standard, a document drawn up by the AENOR Technical Standardisation Committee 150, Environmental Management, as a guide for the implementation of an environmental management systems in hotels and other tourist accommodation, in accordance with the abovementioned ISO standard.<sup>13</sup>

#### 2.5. ECO-LABELS

Eco-labels are voluntary systems of environmental qualification that identify and provide official certification that certain products and services, within a specific category, have less environmental impact.

To obtain these labels, certain sustainable consumption criteria must be fulfilled.

The criteria for tourist accommodation services, including hotels, to obtain an eco-label have already been in place for some time. <sup>14</sup> Today a large number of ecolabels exist for tourism. Some of these are only applicable to the accommodation sector, while others are wider, including catering, transport and even geographical areas. In addition, among those ecolabels referring to accommodation, some include hotels, hostels, guesthouses and campsites, while others specialise in only one kind of accommodation.

Regarding the hotel sector, we can summarise the following aspects as among the main characteristics necessary to obtain eco-labels:

- Selective waste collection in accordance with the municipality to which they belong.
- Installation of water conservation systems.
- Introduction of energy saving and efficiency criteria.
- Incorporation of environmental criteria in purchasing.
- Integration into the surrounding landscape.
- Respect for the surroundings.
- Information to staff and clients on the establishment's environmental policy.

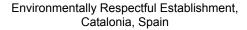
<sup>&</sup>lt;sup>12</sup> Further information at http://www.iso.org/iso/en/ISOOnline.frontpage and at http://www.iso.org/sr

<sup>13</sup> http://www.conama.es/vconama/sd/aenor.htm

<sup>&</sup>lt;sup>14</sup> Further information on ecolabels can be found at ECOTIP, (http://www.eco-tip.org/), an information service provided by ECOTRANS (http://www.ecotrans.org/). In addition, information on European ecolabels can be found at http://www.yourvisit.info/. The Catalan regulation corresponding to the Resolution of 9th May 2000, establishing the environmental criteria for the awarding of the emblem of environmental quality guarantee in hotel establishments, published in the Official Journal of the Government of Catalonia (DOGC) 3154, on 5th June 2000, can be consulted.

For instance, the Government of Catalonia manages the Emblem of Environmental Quality Guarantee and the European Union Eco-label, awarded by the Government of Catalonia's Directorate General for Environmental Quality of the Department of Environment and Housing. These labels' characterised by their credibility, liability and visibility.







**EU Ecolabel** 

The European Union has broadly encouraged the adoption of these labels by tourism establishments, among others. This is the objective promoted by the **VISIT Programme** (Voluntary Initiatives for Sustainable Tourism) that forms part of the "LifeProgramme, endorsed by the European Union. VISIT promotes the creation of a common framework for existing eco-labels, which connotes a basic standard. Thus, the reading of the label by the consumer is made easier and the standard is Europewide. Of the Mediterranean countries, Italy and Spain participate in this project.<sup>15</sup>





The International Green Key

Legambiente Turismo Italy

Source: http://www.fundacionglobalnature.org/proyectos/tuismo\_y\_ma/proyecto\_visit.htm http://www.green-key.org/contact.htm

In Italy, one of the best-known standards locally is that of **Legambiente Turismo**. The aim of this group is to reduce the environmental impact of tourism and to evaluate Italy's natural and cultural heritage. It is applied to hotels, restaurants and other tourist facilities. <sup>16</sup>

At an international level, one of the existing labels is the "**Green Key**", a distinction applicable to both hotels and other tourist facilities. France is among the countries currently participating, with five certified hotels. This label originated in Danish hotels in 1994 and was adopted by France in 1998. Today takes part in the initiatives supported by the Foundation for Environmental Education (FEE) which is active in 37 countries.<sup>17</sup>

In Spain, one of the labels used is the **Q Verde** ("Green Q"), a mark of quality awarded by the Spanish Institute for Tourism Quality. It has been in place since 1996, with the support of the State tourism ministry within the framework of the Secretary General for Tourism's Strategic Programme. <sup>18</sup>

<sup>&</sup>lt;sup>15</sup> http://www.fundacionglobalnature.org/proyectos/tuismo\_y\_ma/proyecto\_visit.htm

<sup>&</sup>lt;sup>16</sup> Further information at http://www.legambienteturismo.it

<sup>&</sup>lt;sup>17</sup> Further information at http://www.green-key.org/index.htm

<sup>18</sup> Further information at http://www.icte.es

Another international Environmental Management System that has been applied throughout the world is the **Green Globe 21**, which supports the idea of sustainable tourism. It began in 1993 as an initiative of the World Travel & Tourism Council (WTTC), within the principles of Agenda 21 and the United Nations Earth Summit in Rio de Janeiro. <sup>19</sup>





International Green Globe 21 Campaign

Q Verde Spain

Source: http://www.greenglobe21.com and http://www.icte.es

#### 2.5.1. Voluntary initiatives and their challenges

Voluntary initiatives can be beneficial for both the hotel sector and for the public administration. However, they also involve a series of difficulties that must be taken into account when making decisions. They are so varied and numerous that they may cause confusion both within tourist companies and among consumers when recognising which establishments are really committed to schemes for environmental improvement. As a result, the WTO suggested to the UN the need to evaluate them, a study that was published with the name "Voluntary Initiatives for Sustainable Tourism: Worldwide Inventory and Comparative Analysis of 104 Eco-labels, Prizes and Self-Commitments".

Following this, intense debates took place concerning the creation of a Council for the Accreditation of Sustainable Tourism (CAST), a global accreditation body with the main aim of accrediting certification systems and other voluntary programmes, in accordance with international directives and standards. In addition, business groups such as the International Hotel and Restaurant Association (IHRA) have been working since 2005 on the creation of a Programme of Good Practices that provides a database for businesspeople on the Internet. <sup>20</sup>

#### 2.6. ENVIRONMENTAL MANAGEMENT AS A MARKETING TOOL

Increased environmental awareness within society means that any project involving greater respect for the environment will be seen positively from outside. It is clear that today, environmental policies applied by a company can be a good sales incentive. However, environmental marketing cannot take place without a genuine basis, as it could turn against the company if the consumer discovers its misuse, creating the effect known as "greenwashing".

In this sense, entrepreneurs should also focus on potential clients, for example choosing the ecolabels that they consider positive and easily recognise.

A hotel can sell its environmentally-aware company image when it is really following a serious policy in this field. The company must advance little by little, but steadily and professionally, along the long path towards environmental excellence.

<sup>&</sup>lt;sup>19</sup> Further information at http://www.greenglobe.org/

<sup>&</sup>lt;sup>20</sup> http://www.ih-ra.com/programmes/index.php#bestPractices

If this process is effective, it is clear that a hotel can make its clients, suppliers and other stakeholders aware of its environmental policy and use it as a sales argument.

- <sup>21</sup> An environmental initiative has been underway since 1994 in the **Municipality of Alcudia, Mallorca**, Spain. This consists of the award of an "**Ecotourism Symbol**" to hotels, with very good results, such as:
- Reduction in water consumption: 258 l/pa less than usual (figures from the year 2000).
- Average electricity consumption of 6.86 kW/pa (figures from the year 2000).
- Increased glass, cardboard and paper collected in selective collection containers.
- Increased numbers of solar panels: 62% of participants.

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<sup>&</sup>lt;sup>21</sup> Further information at http://habitat.aq.upm.es/dubai/

## 3. PROGRAMME OF GOOD HOUSEKEEPING PRACTICES IN HOTELS

The implementation of a programme of good housekeeping practices in companies helps to obtain a reduction in the impact of their different economic activities on their surroundings.

### 3.1. OBJECTIVES AND STRUCTURE OF THE PROGRAMME OF GOOD HOUSEKEEPING PRACTICES

The main objectives of a Programme of Good Housekeeping Practices in Hotels are as follows:

Raising awareness of the hotel company's good housekeeping practices.

With the implementation of the Programme, the aim is an improvement in the habits of the hotel's staff and suppliers, along with the collaboration of clients, through certain actions that are simple to put into practice but that represent a reduction in environmental impacts, economic savings and an improvement of the external image of the hotel establishment.

 Showing the negative environmental impact of not applying them and conversely the environmental and economic benefits of their application.

In order to make the Programme more attractive, attempts have been made to show the negative impact of bad management on the environment, but also to show that the benefits generated by the application of these practices are not purely environmental, but that they also imply economic savings for the hotel, in addition to allowing it to improve its image at a time when environmental awareness among the population welcomes company initiatives of this type.

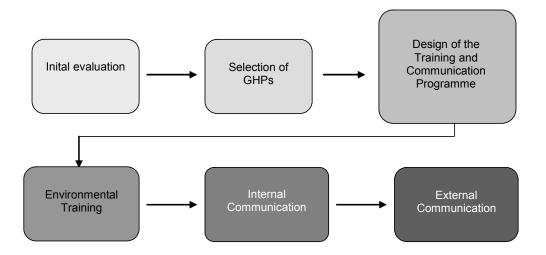
 Providing training on their application and the benefits that they can imply for the management of the hotel.

With the aim of ensuring the correct acquisition of knowledge concerning the good housekeeping practices adopted by the hotel and their correct application, certain training activities aimed at all of the employees of hotel establishments will be given.

Raising workers' awareness of the importance of environmental policy.

The management team will have a basic role to play in the putting into practice and monitoring of the Programme and should also work on staff motivation, ensuring that employees understand the importance of their involvement for the Programme's success, the reason behind the Programme and showing them the benefits that the Programme implies not just for the establishment itself but also for the environment and for society as a whole.

The Programme is structured as follows:



#### 3.2. INITIAL EVALUATION: STARTING POINT

Good Housekeeping Practices are the collection of personal and collective habits that mean that the actions of each person who makes up an organisation allows the correct environmental management of this organisation, minimising the environmental impact of the activity. It should be remembered that in the activity of providing accommodation, the guest forms part of the process and therefore it is useful to ensure their participation along with employees in the application of good practices.

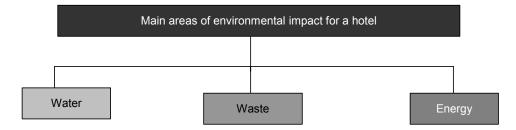
The concept consists of carrying out those practices that reduce environmental impacts as far as possible with the resources available at all times.

To identify the good housekeeping practices that can be applied in the hotel, the processes used in the production of the service should be studied and the impacts of these actions on the environment should be analysed.

Therefore, before considering what the good housekeeping practices that can be applied in an establishment are, it is useful to carry out a diagnosis to check what stage the hotel is at in its greening process.

A questionnaire can be helpful for obtaining preliminary ideas for the areas into which future actions can be divided. The answers will be a good starting point and will provide orientation on the state of the art and the first measures to be taken.

There are three areas into which the main impacts of a hotel on the territory can be classified: waste, water and energy, based on which the initial evaluation of environmental action can be made.



#### 3.2.1. Water

Water is a scarce natural resource that is indispensable for life and for the development of the vast majority of economic activities. It is irreplaceable, cannot be increased by mere human will, is irregular in its form of presentation in time and space, highly vulnerable and susceptible to successive uses.

Based on this statement, the management of this resource must tend towards the maximum reduction of quantities consumed. It is important to be aware of consumption in the different departments of the hotel over a period of time, in order to be able to detect and correct excessive consumption and to be able to plan water-saving systems.



<sup>22</sup> The **Hotel Fuerte Conil**, located in Conil de la Frontera, Cádiz, **Spain**, has installed an Environmental Management System in accordance with International Standard UNE-EN ISO 14001:1996, certified in November 1999.

Within this scheme, the following measures have been installed in order to control and save drinking water:

- An environmentally-sound mean of chlorinating the pool with mineral salt.
- Fortnightly analysis of drinking water and swimming pools.
- Watering plants and gardens with non-drinking water.
- Clients are given information on the following aspects: through information posted in the washrooms, information is given on possible ways of saving water, such as: a shower instead of a bath means using 5 or 6 times less water. Information is also provided for other saving options in relation to the kitchen, such as only using the dishwasher when full, not using water to defrost food, avoiding cooling products down with water.
- Other measures put into place by the hotel in this respect are: changing towels and sheets
  according to the wishes of guests, the installation of partial flush systems in toilets, giving
  preference to the use of environmentally-sound cleaning products.

There are various environmental practices intended to reduce water consumption:

- Monitoring consumption.
- The correct maintenance of the network.
- Purification plants enabling water to be reused.
- Water softening installations.
- Electrical goods with water saving programmes.
- Consumption reduction devices.
- Information and awareness raising among employees and clients.

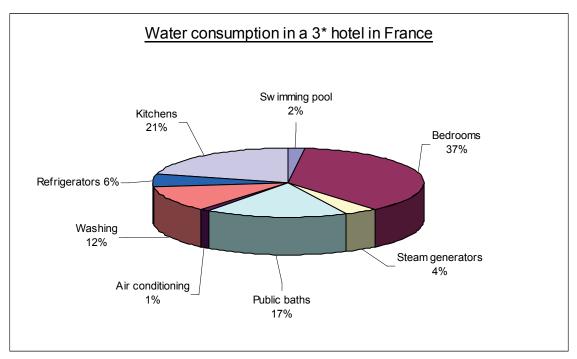
<sup>&</sup>lt;sup>22</sup> Source: ECO- TIP, http://eco-tip.org/T100 e/t100 e.htm

- Rainwater collection systems.
- Raising the bottom of swimming pools to 1.80m or 2.20 m.
- Covering swimming pools when not in use, to prevent evaporation.
- Installing swimming pools with a closed purification system that reuses water.
- Watering green areas with well water or rainwater.
- · Watering green areas by drip, exudation or sprinklers.

#### Self-assessment questionnaire

- Do we know how much water is consumed by the hotel?
- Do we know the consumption of water by sector or by department?
- Do we know the water-saving systems available on the market?
- Is any water-saving system used in the hotel?
- If yes, should the effects of savings be calculated from its installation?
- Do we make periodic checks of the installations to prevent leaks and other incorrect operations that cause increased water consumption?
- Do we have double-flush or variable flow cisterns to save water?
- Do we have machinery with water-saving devices?
- Is rainwater collected and stored for its later use?
- If we have a garden area, do we use the most efficient watering system?
- If we have a swimming pool, do we use the most efficient system so that the water in the swimming pool is reused?
- Have we chosen native plant species that do not need excessive amounts of extra water?
- Do we make our staff aware of the importance of saving water?
- Do we make our clients aware of the importance of saving water?

Each sector of the hotel has different water consumption. It is in the areas of highest consumption that the greatest savings in litres of water can be made.



Source: Mon Hotel & l'environnement. Connaître<sup>23</sup>

#### 3.2.2. Waste

Waste is any substance or object that the owner is getting rid of or has the intention or the obligation of getting rid of.

The philosophy of waste treatment that is most widely accepted and recognised at present can be summarised as followed:

- Reduction in the production of waste based on the criteria of environmentally-sound consumption.
- Reuse of waste produced, looking for possible alternative uses.
- Recycling the waste for its later use as a raw material for the same or a different purpose.
- As a last resort, it will be necessary to eliminate the remaining waste according to the established procedures.



The correct management of waste is necessary and this can start at the stage of purchasing policy; buying products in returnable packaging, encouraging products that result in the reduction of packets and packaging or avoiding toxic or pollutant products; also using selective collection in special containers; evaluating waste for its possible reuse; ensuring the correct management of waste.

<sup>&</sup>lt;sup>23</sup> Guide drawn up by the Conseil régional d'Aquitaine, l'Agence de l'environnement et de la maîtrise de l'énergie (ADEME), la Délégation régionale Aquitaine et la profession hôtelière (UMIHRA), imprimerie BM, Canéjan (33).

The large amount of waste generated by the hotel sector implies a major responsibility. Firstly, it is important to distinguish between the different types of waste: organic, packaging, glass, paper and those containing toxic substances, ensuring that each one is treated appropriately.

In those countries where waste is managed, existing legislation should be fulfilled, without prejudice to the option of applying stricter criteria on a voluntary basis.

In those countries where no criteria are established by law, it is also important to act for the reduction, reuse and recycling of waste, and for its correct disposal.

The effective treatment of waste will not only enable us to avoid the unnecessary pollution of our environment, but also results in economic benefits, reducing costs for transport and disposal, for the supply of products that could be reused and improving the image of the hotel for guests and local residents.

For those Mediterranean countries that are members of the European Union, the European Waste Catalogue (EWC) has been valid since the year 2002. This document provides a detailed, harmonised and non-exhaustive description and classification of all waste, distinguishing between those that are considered hazardous and non-hazardous.

In 1998, the **Asociación Hemaya**, with the support of Town Councils, other NGOs and the business sector, including hotels, began a project in **Egypt** with the aim of setting up a waste management plan in the area to safeguard the Sinai Peninsula, an area rich in corals that was threatened by an intense urbanisation process, in combination with construction projects on a massive scale, and the resulting influx of large numbers of tourists. At that time, the majority of hotels and diving centres dealt with the transportation of their own waste, resulting in the existence of uncontrolled discharges.

To respond to this the following objectives were set:

- 1. Putting the concept of separation at source into practice.
- 2. The construction of a transfer station for the management of solid waste.
- 3. The creation of an environmental centre.

The hotel sector played a major part in this by welcoming the initiative. For example, the Hotels Hilton and Helnan put the first models into place, provided accommodation for the members of the Association for Environmental Protection (APM) and provided them with transport, facilitating the setting up of the new waste treatment system.

#### Self-assessment questionnaire

- Do we know the volume of waste generated by the hotel?
- Do we know this volume by waste type?
- Do we know the source of the waste?
- Are the different waste types separated?
- Are efforts made to reduce waste generation as much as possible?
- Is there a waste reuse process in place?
- Is there a waste recycling process in place?
- Is wastewater treated?
- Do we collect used cooking oil for its correct management?
- Do we provide our employees with information on the importance of reducing, recycling or reusing waste generated?

- Do we choose our suppliers according to the type and quantity of packaging of the products that they supply?
- Do we give our clients with the opportunity to separate the different types of waste?
- Do we have an external waste collection service contracted?
- Do we know the final destination of our waste?

#### 3.2.3. Energy

In the same way as for water, the first thing that we should do to ensure correct energy management in the hotel is to know current consumption figures. Based on the figures obtained, we will be able to adopt the procedures considered most appropriate to adjust energy consumption in accordance with environmental and saving criteria.

It is important that equipment consumes only the energy required for its operation, that it only operates when necessary and that it operates correctly, to avoid losses.

The first thing to do is to contract an electricity service according to the real needs of the hotel (voltage, power,

differentiation in times, etc.) to ensure an optimal service is provided.



Lighting usually consumes between 15 and 25% of the total energy required by a hotel, which means that a precise study of lighting requirements is recommended. It is helpful to use natural light as far as possible, using artificial lighting only when necessary, giving preference to appropriate equipment for each location, incorporating methods that guarantee lower consumption and installing motion detectors in areas such as toilets and gardens, for example, while always taking into account correct maintenance.

The electric motors that operate appliances in the hotel also represent a considerable share of electricity consumption, particularly air conditioning equipment. For this section, the technical characteristics of equipment must be taken into consideration as part of the purchasing process, buying the equipment that incorporates the best energy-saving technology in the process of substituting obsolete equipment.

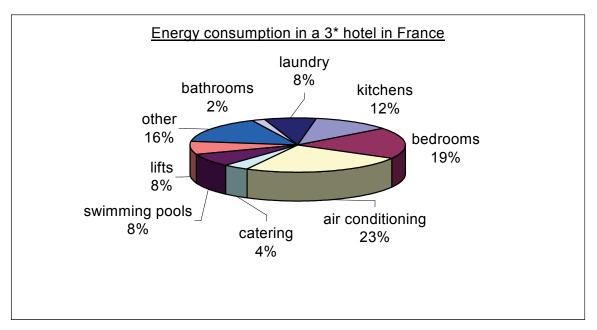
<sup>24</sup> "The **Accor Group** has installed 1,600 m<sup>2</sup> of solar panels in 13 hotels and in the Accor Academy in **France**. Similarly, solar energy covers 60% of hot water needs. On average, the payback period for these technologies is 10 years".

Air conditioning, which represents around 20% of total electricity consumption, requires specific strategies that will vary according to investment possibilities, basically including the insulation of the building, the installation of thermostats, the maintenance of systems, etc.

The use of energy sources with a lower impact on the environment, such as natural gas, or the incorporation of systems for generating cleaner energy, such as photovoltaic panels, should be taken

<sup>&</sup>lt;sup>24</sup> Example taken from The Center for Environmental Leadership in Business, Tour Operators Initiative for Sustainable Tourism Development, "Practical Guide to Good Practices: Managing Environmental and Social Issues in the Accommodations Sector".

into account for the construction of new establishments or the extension and renovation of existing establishments to alleviate the environmental repercussions of each establishment. Insulation is another of the aspects that is often forgotten and that has an important role to play in energy losses that can be avoided with relative ease.



Source. Mon Hotel & l'environnement. Connaître<sup>25</sup>

#### Self-assessment questionnaire

- Do we know how much energy is used in our hotel?
- Do we use different energy production sources?
- Do we make the best possible use of natural light?
- Have we adjusted installations to ensure efficient air conditioning?
- Do we have insulation systems to maintain the internal temperature?
- Is energy efficiency taken into account when electrical appliances are purchased?
- Are low-energy lighting systems in use?
- Are switches with timers in use?
- Are there thermostats in the air conditioning systems?
- Do we use "clean" energy sources?
- Do we use cold washing programmes and fill machines fully in the laundry?
- Do we make our employees aware of the importance of saving energy?
- Do we make our clients aware of the importance of saving energy?

<sup>&</sup>lt;sup>25</sup> Guide drawn up by the Conseil régional d'Aquitaine, l'Agence de l'environnement et de la maîtrise de l'énergie (ADEME), la Délégation régionale Aquitaine et la profession hôtelière (UMIHRA), imprimerie BM, Canéjan (33).

#### 3.3. SELECTION OF GOOD HOUSEKEEPING PRACTICES

Once the initial situation has been analysed, it will be possible to ask a series of questions that will lead us to decide what good practices can be applied and which ones can be effectively applied in each establishment.

It is obviously not necessary to apply all of the good practices possible nor to apply them all from the start; we can establish a calendar for their application depending on several variables, such as the environmental impact that they avoid, their cost, the availability of staff, technical difficulty, the renewal of machinery, etc.

The process of applying good practices will be the responsibility of the hotel's management team, which will decide on the practices to be applied, the process to be followed and the person who will be responsible for the process. However, the involvement of every hotel employee is necessary if implementation is to be successful.

It will be imperative to have the opinion of all those involved in the process. Each person should contribute their practical experience to the possible introduction of each good practice. Therefore, the opinions of the supervisors of all of the different departments, together with those of the other employees, will be heard and reported prior to putting the Programme into practice.

The management team should:

- Define the environmental objectives that are to be attained, according to the resources available, so that it is possible to evaluate the results of actions taken. These objectives should be realistic and should be publicised in order to motivate employees and the guests of each hotel.
- Ensure that every member of staff participates in defining the objectives.
- Establish the Programme of Good housekeeping Practices to be implemented in the hotel.
- Assign the person or people responsible for the Programme, indicating their functions clearly.
- Define and publicise the hotel's environmental policy, along with an environmental statement document explaining what is to be carried out in the hotel in this respect.
- Facilitate the publicising of the hotel's environmental commitment among the different stakeholders.
- Ensure staff training and awareness-raising.
- Look for new systems of saving energy and consider alternative energies to be used.
- Encourage proposals for actions that contribute to improving environmental quality.
- Assign resources in the form of those means and instruments necessary for carrying out good housekeeping practices and for the preventive actions necessary to minimise environmental impact.
- Create information and awareness-raising programmes for stakeholders.
- Supervise the application of the good housekeeping practices defined. Monitor their application, correcting potential problems emerging from their application.
- Evaluate the effectiveness of environmental actions, including training.
- Lead and/or participate in environmental actions in the area in which the hotel is located.
- Communicate those environmental incidents established by regulations to the competent body.

#### 3.4. DESIGN OF THE TRAINING AND COMMUNICATION PROGRAMME

The implementation of the Programme will take place using three parallel routes:

- A training plan for hotel staff.
- An internal communication plan for hotel staff.
- An external communication plan for hotel guests.

The process of applying good housekeeping practices in the hotel should be planned and should take place in stages, with the agreement of the employees involved and with those technical and economic possibilities available.

We should avoid the unrealistic and unattainable programming of maximum objectives that will only result in a feeling of frustration for the management team and the other employees involved.

Work must take place on a planning process adapted to the available possibilities, which sets objectives that can be reached and are quantifiable, so that the staff and clientele become involved in meeting the objectives. It is a question of making small advances and setting attainable objectives in a dynamic process of continuous improvement.

#### 3.5. ENVIRONMENTAL TRAINING

#### 3.5.1. Prior considerations

The training plan is meant to be simple to implement by hotel supervisors and should be attractive and easy to assimilate for the staff to which it is given.

The training, which will be given by department in hotels that so require due to their size and the number of staff members, will avoid theoretical or generic concepts and will focus on the day-to-day activity of the hotel. An analysis of the good practices that will later be applied in each department will be made. The basic idea will be the motivation of staff by the trainers and heads of department with a view to ensuring the successful implementation of the good practices.

#### **Objectives**

The objectives of the Training Plan in Good Housekeeping Practices in the company consist of:

- Making the management team and the other staff of the hotel aware of the environmental impacts that the hotel's activities causes to the surroundings and the actions that each person making up the organisation can take to minimise this impact.
- Making hotel staff aware of the importance of implementing a programme of good housekeeping practices in the hotel.
- Improving the knowledge and attitudes of hotel staff, which is necessary for carrying out a programme of good housekeeping practices in the hotel company.

#### Methodology

The training of hotel staff in areas of good practices should be done by department in those establishments of a size that necessitates this, so that the **knowledge** that employees gain is the most **practical** and appropriate possible for their daily activities. In smaller hotels, training can be held as a group session for all of the hotel's staff.

All of the training actions will require staff presence, although where there is an intranet service in the company, the implementation of **virtual training** that would serve as a reminder to workers could be studied as an instrument for communication.

The basis of training will be the specific good practices that it has been decided to apply in the hotel. The specific good practice, its application and the environmental benefits that it involves will be presented.

From there, an attempt will be made to establish a **dialogue with participants**. With the specific good housekeeping practice as the starting point, reflection will be encouraged on the reasons for its application. The impact that not carrying it out could have on the environment will be dealt with groups corresponding to waste, saving water, saving energy, air pollution and noise pollution.

#### **Training team**

The classes on good housekeeping practices aimed at all of the staff could be given by an **internal expert or by a member of hotel staff** with the appropriate training and teaching capacity.

In any case, those responsible for training should meet certain competence requirements:

- Knowledge: of the material in which training is to be given, of teaching, methodologies, etc.
- Technical skills: organisation and planning, clear and understandable discourse, capacity for motivation and awareness raising.
- Attitudes: propensity for dialogue, open mindset, good teamwork skills, responsible, disciplined.

#### **Educational resources**

The educational material considered necessary to reinforce the theoretical explanation should be used clearly, in order to show the negative impacts caused by a specific action and the benefits that a good housekeeping practice can bring.

In this sense, the educational resources anticipated will be:

- Leaflets: participants will be provided with leaflets outlining general good practices or those
  that are specific to the different departments, with blank space left for making notes. These
  leaflets will also serve as a reminder for employees when the training is over.
- PowerPoint projections: the trainer will have support material for the explanations that can be projected throughout the session.
- Slides: the support material for the trainer will also be provided in slide format, thus anticipating situations where the appropriate IT equipment required for a PowerPoint presentation is not available.

All of the instruments will contain spaces for the personalisation of the product by the hotel, if required (photographs, images, logos, etc.).

#### Calendar

The training will be programmed according to a calendar agreed with the management and other employees, according to the characteristics of each department, the needs for service and staff shifts.

Efforts will be made to provide training during working hours and during those periods where there is a lower workload in the hotel.

#### **Premises**

It is recommended that wherever possible, training takes place on the hotel premises. The most appropriate would be the provision of a meeting room to this end, in order to teach the more theoretical aspects and to

combine them with more practical explanations, that will take place throughout the hotel premises in order to show as clearly as possible the concrete applicability of the good practices proposed.

#### **Participants**

The number of participants will depend on the number of members of staff in each department, but efforts will be made for groups not to exceed 15 people, in order to encourage participation and mainly practical training in the subject.

#### **Duration**

It is recommended that the length of training sessions be around one and a half to two hours (maximum) in order to hold the attention of participants.

#### **Evaluation**

The evaluation of the training will be based on the one hand on the action itself and on the other on the attaining of the anticipated objectives.

#### Instruments for reactive evaluation will consist of:

- A questionnaire that will be given to participants at the end of the session. The first part of the questionnaire gives the participants the opportunity to give their opinion on what they thought of the way the training was carried out (methodology, teaching, materials, etc.). The second part of the questionnaire will ask a series of questions to evaluate the assimilation of the content of the training and the attainment of the objectives set in the training plan. This will not be presented as an evaluation of knowledge as such, so as not to provoke an adverse reaction or the loss of motivation by participants in the future application of the GHP. The questions asked will be along the lines of: "What aspects of the training session will you apply to your job?".
- An evaluation report, made by the trainer, based on the development of the course and an idea-sharing session within the group, will serve to evaluate the attainment of the objectives set in the training plan.

The **training evaluation instruments** that will be applied three months after the training plan is finished will consist of:

- Evaluation reports written by the head of department or the person responsible for the training programme, which will evaluate the level of attainment of the training plan objectives.
- Questionnaires to be filled out by the staff. The achievement of the objectives set in the training sessions will be evaluated, as well as the difficulties found due to the processes or installations and the proposals for improvement made by the staff.

The basic indicators that will be used to evaluate the efficiency of the training programme are:

- The level of knowledge of environmental impacts and their minimisation.
- The level of predisposition to take in and apply the knowledge imparted.
- The level of knowledge of good housekeeping practices, and attitudes.

#### 3.6. INTERNAL COMMUNICATION

This is aimed at the staff of the hotel establishment.

The objective will be threefold:

- Reminding workers of the Good Housekeeping Practices studied in the training process and the need for their real application in the workplace.
- Making the employee aware of the need for the application of the Good Housekeeping Practices in order to reduce the negative impacts of the hotel's operation on the environment.
- Increasing the involvement of employees in the practical application of the Programme of Good Housekeeping Practices in the hotel.

The instruments that will be used will basically be in printed format and in the form of communication through the internal computer network. Where this does not exist, the more traditional methods of verbal communication and paper materials will be used.

The elements of internal communication proposed are:

- Leaflets of Good Housekeeping Practices for employees.
- A general poster of good housekeeping practices for employees.
- A specific poster of good housekeeping practices by department for employees.

These materials will be presented to employees during the training sessions and will later be distributed (in the case of the leaflets) or hung in those places in the hotel that are considered most appropriate as an element to act as a reminder for employees.

#### 3.7. EXTERNAL COMMUNICATION

External communication is aimed basically at clients, but also at suppliers and other external actors such as the public administration, the media, etc.

The objectives in terms of clients will mainly be to make them aware of the Programme of Good Housekeeping Practices that is applied in the hotel and those that can be adopted voluntarily, in addition to raising their awareness, increasing their involvement and lastly fostering the image of the hotel as a company that is committed to the environment.

The instruments that can be used are videos, displays, stickers, information in the hotel directory, information on the hotel website, personal verbal communication, hotel advertising materials and through public relations.

The elements of external communication proposed are:

- A display in reception.
- Leaflets for the display in reception informing quests of the Programme.
- A letter to guests (in the directory in rooms).
- A leaflet of good environmental practices for guests (rooms).
- A sticker for the change of towels in bathrooms.
- · Indication for toilets with a double flush.

With respect to other targets of external communication, the aims will also be to make them aware of the Programme, to strengthen the environmentally-respectful image of the hotel and to a lesser extent to raise awareness of environmental questions.

Those elements of communication intended for hotel guests should be provided in several languages, while those aimed at hotel employees will be provided in the local language(s).

The aims of communication with suppliers will also be based on making them aware of the Programme, raising their awareness to encourage their collaboration, and increasing their involvement.

# 4. GOOD HOUSEKEEPING PRACTICES

#### 4.1. GOOD HOUSEKEEPING PRACTICES

In this Manual of Good Housekeeping Practices, certain good housekeeping practices, that are considered of particular interest, have been selected due to the ease of their application and the effects that they represent for the environment. They are clearly not all represented here and the hotel owner can select those they consider priority, the calendar for their application and the addition of others that they feel are relevant.

Along with the good practices, certain brief comments and complementary figures will be given to help understand their context and to help during staff training.

Good housekeeping practices aimed at guests should obviously be transmitted in the form of recommendations, with efforts made to attain their complicity in the application of the Programme.

## 4.1.1. General good practices

This section includes those good housekeeping practices intended for all of the hotel staff.

Use water carefully, not leaving taps on when not necessary.

In Mediterranean countries, water is a scarce resource and it is therefore necessary to save this resource as much as possible, trying to avoid the habit of leaving the tap on when not in use. By doing this, we will benefit the environment and save money at the same time. We should bear in mind that of all the water on the planet, only 1% is useable.

It should be remembered that average daily water consumption per inhabitant is some 150 litres and is tending to increase, particularly in developed countries. However, in hotels these figures increase to figures that vary between 300 to 600 litres guest/night.

A tap that loses a drip each second represents a monthly consumption of 1,000 to 2,000 litres, and a toilet cistern can lose up to 150 litres per day.

Make the best possible use of natural light.

The basic idea for lighting is to make the most of natural light, which is better for the sight and costs nothing. This measure can be accompanied by painting the walls in light colours that absorb less light, or by opening the curtains.

Switch lights off whenever they are not necessary.

An action as simple as switching lights off when they are not necessary, trying to make the most of natural light, allows us to make significant energy savings.

It should be remembered that it is thought that between 15% and 25% of the electrical energy consumed in a hotel is used in the lighting of the different areas of the hotel.

However, it is not convenient to switch of fluorescent lights in areas where they will be switched back on often. All things considered, if they are not going to be required for over 15-20 minutes, it is better to switch them off.

Avoid the excessive lighting of exteriors (facades, balconies, signs).

Correctly-designed lighting, that highlights specific points and uses low-consumption bulbs, helps to economise on energy without loss of brightness.

 Place each waste type in the correct container, provided that there are containers provided for the separation of different waste types.

The correct classification of waste is a step that is strictly necessary for its subsequent recycling, or where this is not possible, for its disposal in a way that is appropriate to the waste type.

Recycling will permit the treatment of waste intended for its later reuse, avoiding accumulation in landfill sites and the damaging effects of its indiscriminate incineration.

Adjust the volume of the voice and items of equipment to avoid noise pollution.

Sound levels that are considered correct are up to 40 decibels during the day and 30 decibels during the night.

The comfort of guests staying in the hotel, but also that of employees, depends to a great extent on the level of noise produced in the different areas at different times of day.

Inform clients and collaborators of the environmental actions that are being carried out.

The hotel staff will communicate the environmental actions that are being carried out to guests whenever they are asked about these or when the hotel management has indicated that they should do so.

• Follow the procedures laid down by the management team to ensure maximum efficiency and respect for the environment.

The management team establishes the procedures depending on an established environmental policy. It is important that the hotel staff respect and follow the procedures established, as these are not introduced randomly but with a specific environmental efficiency objective in mind.

 Be responsible for the environmental action and for contributing proposals for improvement to the management team.

The correct action of each hotel employee is necessary for the correct operation of the programme. The incorrect action of just one person can destroy the results of all the others.

Instructions received should therefore be followed and in addition to this, employees should become involved in such a way that they make those suggestions for improvement that they think are appropriate and that they come upon depending on the task they are carrying out, to the management team. Often it is while carrying out a specific task that the possibilities for environmental improvement to processes are seen. These should then be transmitted to the management team, which is sometimes distanced from the daily working tasks.

 Notify supervisors of the incorrect operation of any installation that could cause negative environmental effects.

Hotel employees in their day-to-day work may discover the incorrect operation of equipment, machinery and installations. It is important that these incidents are communicated quickly to supervisors in order to avoid negative environmental consequences as quickly as possible.

## 4.1.2. Good practices for the reception, administration and sales departments

• Reuse paper on both sides for internal use notes .

On many occasions we use new paper for taking notes or sketching that could be done on used paper, either on a part that has not yet been written on or on the back. In this way paper is saved. In addition, the use of recycled paper is recommended.

Recycle paper once it has been used.

When paper can no longer be reused, it should be placed in the corresponding container for it to be recycled. To understand the importance of recycling, it should be remembered that to produce a tonne of new paper, 2,400 kg of wood, 200,000 litres of water and 7,000 kWh of electricity are required, whereas to produce the same amount of recycled paper, all that is required is old paper, 20,000 litres of water and 2,500 kWh of electrical energy, besides being a process that is less polluting.

 Switch off the computer and other electrical equipment when it is not being used for long periods of time.

This is another means of saving electricity. Computers and lights in work areas are usually left on when the employee goes for a break, for lunch and during meetings that we know in advance will be long, simply so we do not have to bother to switch them on again. This practice consumes a great deal of energy. We should check that the computer has indeed been switched off when we leave the work area, or at least the monitor for shorter absences, and it is also useful to have one person who is responsible for switching off the lights at the end of the day, so that they are not left on overnight.

Use IT formats and avoid printing documents if it is not necessary.

New technologies allow us to communicate using electronic media that avoid the constant use of paper. E-mail can therefore help us with this saving measure.

In addition to this, it is often unnecessary to print all of the work documents received in the computer as, if they are short enough, they can be read on the screen.

 Toner and ink cartridges for photocopiers, printers and the fax machine should be put in their specific container for their correct treatment.

This is waste that is considered hazardous, together with other waste such as batteries, paints, fluorescent lights and medicines. They therefore require special treatment by companies specialised in managing this type of waste.

Cartridges can usually be removed and replaced following their cleaning and refilling and can be used up to fifty times, offering the same print quality as a new cartridge. Residual toner should be managed in a destruction centre, where it will be incinerated at 1,500°C.

 Collect client suggestions on environmental matters and pass them on to the Hotel Management.

The communication plan for good housekeeping practices in the hotel aimed at clients may succeed in raising their awareness of this subject or it may be on their own initiative that clients communicate their concerns or suggestions in this area to contact staff.

These proposals from clients should be collected and transmitted to the management team for them to evaluate them and, where it is considered appropriate, apply them to the hotel's operation to improve its environmental management and to ensure the full satisfaction of the hotel guests on seeing that their suggestions are taken into account.

Communicate the hotel's environmental policy to clients.

The contact staff in the hotel should be especially prepared and will be responsible for communicating the hotel's environmental policy to clients when they are asked questions in this respect or when they are instructed to do so by the hotel management.

Provide clients with information about good practices outside the establishment.

Information can be provided in reception about the possible use of collective public transport for journeys, respecting the neighbours and avoiding noise, businesses selling local products, etc.

### 4.1.3. Good practices for the purchasing department

 When changing equipment, choose the machinery that ensures the lowest level of environmental impact.

The machinery in a hotel is obviously not changed every day, but it is important that this department knows the options on the market for cleaner technologies that are intended to reduce the environmental impact of their use and of the processes in which they are used.

It is a matter of incorporating these machines as machinery that becomes obsolete or needs to be changed for other reasons is replaced.

Give preference to those product or suppliers with official ecolabels.

Ecolabels are voluntary systems of environmental qualification that identify and provide official certification that certain products and services, within a specific category, have less environmental impact.

Ask suppliers to minimise their packaging.

50% of the solid waste produced daily in a hotel is packets and packaging of products consumed. It is therefore of great importance to try and reduce the quantity of this waste. Sometimes the function of packaging is more for presentation than real usefulness and it is therefore important to try and communicate the waste reduction policy to suppliers, asking them to reduce packaging as much as possible. Agreements can also be made with suppliers that, wherever possible, they use returnable packaging and in any case, if packaging is single-use, the suppliers are responsible for the packaging, undertaking to manage it correctly.

Choose environmentally-sound products.

Although on some occasions the final decision does not depend solely on the purchasing department, it will be necessary to make an effort to get to know all of the products available on the market that can fulfil the required functions but with less environmental cost (ecoconsumption) in order to make the best selection.

At present a wide variety of environmentally-sound products are available on the market. These represent an alternative to traditional products and their number is increasing every day (biodegradable products, detergents without phosphates, mercury-free batteries, etc). For furniture, for example, it is important to know how the wood has been treated and whether it comes from sustainably managed forests.

In addition to this, it is important to choose environmentally-sound products for catering. It would also be of interest to opt for organic and fresh products, with no artificial colour or preservatives.

In addition, we should ensure that the guarantees show that these products really have the properties advertised, for example through official eco-labels.

Avoid products in individual portions to minimise waste.

Packaging can be reduced by using concentrated products. Another way of saving waste is to change products in individual portions (sugar, jam etc.) for those that are sold in large quantities. In the same way, the purchase of single-use products should be avoided, giving preference to those that can be reused.

Keep the warehouse in order.

A well-organised warehouse, in addition to providing clear benefits in terms of logistics and operations, can also help avoid environmental damage.

In this way, products going out of date and thus becoming unnecessary waste can be avoided. The deterioration of specific products and their packaging and the production of accidental leaks that end up producing waste that is harmful to the environment, can also be avoided.

Opt for locally-producedproducts .

It is recommended that when purchases are made, products are bought that are produced in the area in which the hotel is located. There are several reasons for this: it is considered a way of allowing guests to get to know the country's culture, of promoting the local economy, of maintaining traditional agriculture and livestock farming activities, etc.

However, in addition to those factors, this practice also involves saving energy costs, as it eliminates transport from places far from the point of consumption and also saves on processes of freezing, packaging, etc.

 The introduction of environmental requirements into contracts for purchasing, services and carrying out construction work.

The hotel's policy for contracting external services of any type should take environmental criteria into consideration. This means requiring certain contractual obligations of suppliers in order to ensure that the service or work is carried out in a way that is based on respect for the environment.

In this way, not only are the hotel's good housekeeping practices applied, but influence is also exerted on other companies to realise the importance of following these criteria if they want to work for other companies, thus starting a chain that spreads environmental awareness throughout the business world.

Asking for the safety records for products from suppliers.

These records show the safety regulations and actions to be taken in case of emergency and provide us with information on the hazardous nature, the correct handling, transport and storage of the product.

#### 4.1.4. Good practices for the catering department

Open refrigerators only for the time that is absolutely necessary.

Each time refrigerator doors are opened, a great deal of energy escapes. It is therefore helpful to open the doors as little as possible, and only for the time that is absolutely necessary. It is also useful to remove all the products required in one go and to have them well organised, so that everything can be found quickly.

When putting products in to freeze, wait until they are cold first.

It is recommended that the refrigerator be defrosted regularly, as the layer of ice that forms on the walls reduces its efficiency. Five millimetres of ice on the interior walls of a refrigerator or freezer increase energy consumption by 30%. In the same way, if the temperature of the refrigerator is changed by one degree, 8% less energy is required.

Cover cooking pots when we are cooking.

Heat energy is lost each time we uncover cooking pots or when we open the door of the oven, and it is therefore useful to do this for as little as possible. When the correct cooking temperature is reached the heat should be reduced. In addition to this, it is helpful to use pots that cover the entire heat source. If an electric cooker is used, rings should be switched off before cooking is finished, as the residual heat will finish off the process of cooking the food.

It should be remembered that opening the door of an oven that is on results in the loss of 20% of the accumulated heat.

Do not leave burners lit when not in use.

Sometimes energy (gas or electricity) is consumed without being used. This is the case when burners are left on while cooking is not taking place.

• Do not pour used oil down the drain. It should be placed in a specific container.

All of the waste generated in a hotel should follow the process established by the management and be placed in the corresponding container for its correct management.

Certain types of waste exist which, due to their damaging effect on the environment, must be correctly collected and treated, as in the case of used oil. Oil that is poured into the water supply forms a layer on the surface, which prevents oxygenation and complicates the treatment of the water in the treatment plants.

It should be remembered that a litre of used oil can contaminate up to 400,000 litres of water.

Choose reusable packaging.

Wherever possible, reusable packaging should be chosen, as the use of non-reusable packaging, in addition to being very costly to manufacture, uses energy and generates waste that is difficult to treat.

Do not defrost products using water or heat.

Products can be defrosted by leaving them at room temperature, which avoids the unnecessary waste of water or energy.

## 4.1.5. Good practices for the housekeeping department

Use the appropriate amount of water for cleaning tasks.

This is a question of not wasting a scarce resource such as water in processes such as cleaning in which large quantities of water can be consumed. It is also recommended that cold water be used whenever possible.

Advise maintenance if installations are not working properly.

The incorrect operation of specific equipment can result in negative environmental effects, higher water consumption, discharges of pollutant products, increased electricity consumption and other effects that can be avoided if staff notify supervisors quickly of any incidents that occur so that they can be resolved rapidly.

• Avoid the most aggressive products and choose products with a neutral pH, which are biodegradable or have a low phosphate content. Avoid aerosols.

Cleaning products contain components that can be very aggressive for the environment and therefore special care should be taken when they are used, avoiding those that contain components with a higher environmental impact. Products containing sulphates, phosphates or strong bleaches should be avoided.

Biodegradable products that respect the environment are available on the market, as are manual sprays that mean that aerosols are not required, as they are difficult to recycle.

Use the correct amount of cleaning products.

A higher quantity of product does not improve the result, but simply increases the pollutant load of the water.

 Follow washing machine programmes, only using them when they are full and with cold water whenever possible.

Half filling a washing machine means consuming double amount of energy necessary. Hot water should only be used where necessary, in order to save energy. A temperature of 60°C is high enough for laundry to come out clean.

As a complementary energy-saving measure, wherever possible laundry should be dried outdoors.

• Do not dispose of pollutant products down the drain.

Waste should be managed appropriately, handing it in to the housekeeping supervisor or following the procedures established for its correct management.

Ensure that there is environmental information material available for clients in the rooms.

When the hotel has communication materials for clients staying in the hotel, room staff will be responsible for ensuring that this documentation is in the correct place and if not, should refill it or inform the person in charge of this.

- Place waste bins in strategic places such as on beaches and paths that belong to the hotel.
   By making the task easier for guests, better results will be obtained.
- Place waste separation bins in rooms and kitchens.

To implement a waste separation policy, it is imperative to have points where waste can be separated and classified.

- Store somewhere clean and secure duly separated waste until it is collected by the municipality.
   Storing the waste in a secure place, a measure that is practical and hygienic, is almost as important as separating it.
- When waste has been separated by guests, it should be placed in the corresponding bag in the trolley.

Provided that the corresponding equipment is available (cleaning trolleys with different compartments or bags), the room staff can follow the procedure of recycling products left in the rooms by clients.

Keep hazardous products in safe places, following the safety sheet for their correct use.
 This will prevent leaks that could pollute the environment or prove hazard for hotel staff or guests.

#### 4.1.6. Good practices for the maintenance department

Measure the initial consumption of electricity, water, gas and fuel used.

Before the Programme starts, it is important to measure the initial values. In this way, the current use of resources can be noted, along with whether consumption is excessive. With these values it will be possible to determine the effectiveness of the policy of good housekeeping practices that has been undertaken.

Inspect installations periodically, organising a calendar of preventive maintenance.

The regular inspection of installations is not only intended to anticipate possible faults that could occur in the machinery that serves the hotel. Incorrect operation can also have negative environmental effects, such as leaks of toxic liquids, water loss, the emission of pollutant gases and noise.

In the case of the air conditioning, for example, the same care should be taken, carrying out regular inspections in order to avoid possible illnesses that are transmitted through the temperature control system.

The best way of ensuring the systematic inspection of the hotel installations is to establish a maintenance calendar. This will ensure that no installation is forgotten and that too much time does not pass between inspections. Incidents should be marked on the calendar so that they can be resolved and whether an installation is reaching the end of its useful life, so that it can be replaced before any environmental problem occurs.

Install low-energy lighting.

On the one hand, incandescent bulbs that consume a lot of energy should be replaced with traditional or compact fluorescent bulbs in order to save energy. Installing low-energy bulbs, although they have a higher initial cost, can be amortised in a period of between approximately one and two years, as it involves a saving of 60% of normal consumption. The way that client areas and services areas are to be lit and whether this meets requirements should be taken into account.

Another mean of saving energy is the installation of switches that operate from different points of the corridors or stairs, in order to enable lights to be switched on and off as required.

Install devices allowing the saving of energy or water.

Devices are available that allow the saving of energy and of resources in general:

- Sensors and timers for water or light.
- Water-saving showerheads.
- Soap and shampoo dispensers.
- Voluntary stop or double flush systems in bathroom cisterns, or the use of flow meters
- The installation of mixer taps.
- · Placing diffusers on the taps.
- Installing high-pressure, low-flow showerheads.
- Pressure reduction devices in the main water network.
- · Aerators and flow regulators for taps.

These devices can result in savings of over 50%, without resulting in lower quality of service.

- Know the specifications sheets of products well to avoid their incorrect use.
  - Many products are used in the maintenance of the installations of a hotel that are potentially damaging for the environment, such as gardening products like fertilisers or insecticides, or products used for the maintenance of machines, such as mineral oils. These should be used cautiously, following the manufacturer's instructions.
- Install a network of water and electricity meters where possible.
  - Adequate control of water and electricity consumption is the best way of ensuring that these are saved. By installing meters, we can be aware of the areas of the hotel with the highest consumption and based on the figures collected, take the corrective measures considered appropriate to reduce it.
- Check if there is a municipal water treatment system.
  - If this is the case, checks should be made as to whether wastewater is discharged into the plant and not into the environment. If there is no treatment plant, the best treatment options available should be determined, choosing natural methods such as plants and bacteria, if this is possible.
- Keep the temperature control system at between 22°C and 24°C in summer and between 18°C and 21°C in winter, always taking humidity levels into account.

Air conditioning and cooling systems are one of the main sources of air pollution from a hotel, consuming around 20% of total energy consumed by a hotel. A reduction of the air temperature by one degree enables a 6% energy saving.

It is recommended that bioclimatic architecture criteria be taken into account for the design of hotel establishments. The correct aspect or choice of materials allows savings to be made and can avoid later problems.

In the case of hotels that are already constructed, we can apply measures to reduce the effects of air conditioning on the environment, beginning with the choice of the air conditioning appliance, the thermal insulation of the building, the installation of thermostats, etc. In any case, maintaining the temperature is a simple way to contribute to savings and respect for the environment.

- Avoid starting up the air conditioning at a very cold temperature when it is first switched on.
   Putting the air conditioning on gradually will reduce energy consumption.
- Use automatic systems for switching lights and cooling and heating systems on and off.

The amount of energy used for these functions is significant and making them automatic can lead to significant savings. Smart cards instead of keys to rooms or the automatic switching off of heating or cooling systems when windows are opened can mean significant energy savings. The automatic system of switching lights on and off and controlling the water output in taps, using motion detectors, can also be installed in washrooms.

Ensure the correct insulation of those elements that are likely to lead to energy losses, such as
doors, windows or hot water pipes.

In a newly-constructed building, insulation is of major importance today. In buildings that are already constructed, efforts should be made to install insulation that will eliminate energy losses, for example the use of double glazing or double windows.

- Install clean energy sources as an alternative to traditional, pollutant types.
  - Wherever possible, incorporate less-polluting energy sources that fully or partially substitute traditional energy.
- Plant local vegetation in garden areas that adapts better to rainfall in the area.

For example, plant species such as lawn or plants from other regions, such as tropical plants, require large amounts of water to survive. It makes sense to choose local plants that are adapted to the surroundings and that do not require so much water for their growth.

In addition, imported species are usually very vulnerable to disease and require more fertiliser and pesticides (pollutant products), while by planting local species we can reduce the use of such products.

Use an automatic watering system and water at times when there is less sunlight.

In hotels with large garden areas, manual watering with a hose uses large amounts of water with unequal effects. The installation of an automatic drip or aspersion watering system is recommended as, although it may require higher initial expenditure, in the long term it will result in an economic saving and also save water. Watering at night is also recommended, to avoid the loss of water by evaporation.

- The use of organic waste for making compost that can be used as garden fertiliser.
  - A large amount of organic waste is generated in a hotel, which, if an appropriate space is available for its storage, can be converted into compost for the garden soil.
- Choose the most efficient electrical appliances, taking into account water consumption, electricity consumption, the use of toxic substances in the structure, and ecodesign.

Some examples of this point are:

a) Dishwashers: These are preferable to manual washing of large quantities, saving unnecessary water use of 45 litres per person, or 25 if the tap is turned off during washing.

The appropriate appliance will depend on the size and category of the establishment. According to the European ecolabel, an efficient dishwasher for 10 settings should not consume more than 15.5 litres per washing cycle.

- b) Coffee machines: A coffee machine with a water recirculation system should be chosen, known as a "continuous brew" machine, which allows up to 100ml of water to be saved per cup served.
- c) Ice machines: It is important that these have an efficient refrigeration system, preventing water loss.
- d) Washing machines: An efficient washing machine, according to the EU ecolabel, should consume no more than 15 litres of water per kg of laundry in a normal cotton cycle at 60°C. Read the manual to ensure that the washing machine is used as efficiently as possible. Saving systems can be divided into:
  - Mechanical: such as anti-return valves, supply break systems in case of leaks, filters to catch objects that could block the pipes.
  - Electronic: Pre-dampening systems as opposed to pre-wash (shower effect), water cloudiness detectors that allow a better result to be obtained with less water, load weight detection systems, enabling the quantity of water to be adapted.
- e) Cooling and heating: It is better to use an air conditioning system that uses air rather than water for its operation. The same applies for heating. To make the most of these systems. good insulation is necessary, using special glass or double glazing. Cleaning the filters is important for correct operation.<sup>26</sup>

## 4.1.7. Good practices for the entertainment department

- Organise recreational activities that help raise clients' environmental awareness, particularly for children (waste separation, respect for their surroundings, etc.).
  - This is a simple way of increasing clients' environmental awareness and explaining the environmental actions taken in the hotel in a pleasant way, asking for their collaboration.
- Suggest environmentally friendly activities for guests (bicycle trips, horse riding, etc.).
   Guests are staying in the hotel, but the repercussions of their activities go beyond the hotel grounds. Because of this, activities suggested to guests should be as respectful as possible of the natural and cultural environment of the area.
- Avoid the use of potentially-polluting materials in entertainment activities (paints, plastics, etc.).
   Another way of contributing to environmental respect is the use of non-polluting materials, showing these to the clients as a didactic element.
- Use recycled materials produced by the hotel's activity in entertainment activities (packaging, laundry, paper, etc.).
  - Some waste products from the hotel's activity can be useful for entertainment activities. This is an opportunity to show possibilities for reuse.

### 4.1.8. Good practices aimed at clients

· Keep lights switched off when not necessary.

<sup>&</sup>lt;sup>26</sup> The figures mentioned were taken from the "Guía de Buenas Prácticas Ambientales para Alojamientos Turísticos de la Hoya de Huesca", produced by the Fundación Ecología y Desarrollo, Huella Digital, 2003.

In many small hotels, cards that automatically switch off the lights in bedrooms and other spaces are not used, so it is recommended that clients be reminded to do this.

Having a shower instead of a bath saves a large amount of water.

The amount of water used to fill a bath is far greater than the amount used for a shower.

 Suggest a system to clients for establishing when they think it is necessary to change their towels and sheets, to avoid doing it every day.

The daily laundering of towels and bed linen, which is not usual in a domestic situation, involves a significant use of energy, the consumption of pollutant products and the generation of waste.

If any anomaly is noted in the installations (leaks, drips, etc), the hotel staff should be notified.

While regular inspections are made of the installations in hotel establishments, it is still possible that not all anomalies s are detected, particularly in occupied rooms. If clients report anomalies, these can be resolved more quickly, avoiding discomfort and possible negative effects on the environment.

Keep the air conditioning at the recommended temperature.

In hotel establishments that do not have a centralised air conditioning system, guests should be reminded to maintain a recommended comfort temperature.

Do not throw waste into the toilet. Use the waste bins.

The correct place to dispose of waste is in the waste bins. Disposing of objects directly into the drainage system generates pollution that can easily be avoided.

Turn taps off while brushing teeth and shaving.

By doing this, up to 10 litres of water can be saved each time we brush our teeth or shave.

Throw out waste selectively.

The hotel establishment should facilitate guests' collaboration, and it is therefore helpful to incorporate coloured waste bins or waste bins with separate compartments that allow the client to participate in the hotel's waste management policy.

#### 4.2. OTHER ENVIRONMENTAL ASPECTS

## 4.2.1. Air pollution

The main sources of pollution from a hotel are:

- Boilers and combustion equipment.
- Air conditioning and cooling equipment.
- Aerosols for cleaning products.

In the case of boilers and combustion equipment, fossil fuels should, where possible, be replaced with natural gas. The possible use of cogeneration systems, insulation systems, regular emissions checks, cleaning and maintenance plans, temperature regulation of hot water, etc. should be studied.

As regards air conditioning and refrigeration equipment, systems should always be used that do not contain CFCs or HCFCs, which affect the ozone layer. The corresponding cleaning and maintenance should be carried out.

In the case of aerosols for cleaning products, these should be substituted with environmentally-sound products that operate with manual diffusers.

Lastly, the use of systems<sup>27</sup> for making the most of non-polluting alternative energies, such as solar power, should not be forgotten, particularly in areas with high annual sunshine levels. This is applicable particularly to the Mediterranean region.

### 4.2.2. Noise pollution

Disturbances caused by undesirable noise can have a significant effect on employee productivity and on the quality of guests' stay in the hotel.

Sound levels should be no more than 40 decibels during the day and 30 decibels at night.

To attain this objective, studies should be made of insulation systems, the location of noisy machinery in places that are removed and soundproofed, carrying out the noisiest activities at times when they cause as little disturbance as possible, posters asking for silence, etc. In addition, sustainable construction criteria should be taken into account for possible extensions or renovations to the hotel.

#### 4.2.3. Wastewater

It should also be remembered that hotels are major producers of wastewater, discharged in sinks, showers, toilets, floors, baths, dishwashers and gardens.

If it is not treated correctly, as is the case in many areas at present, this water is dangerous for both humans and the environment, polluting local water supplies, agriculture, rivers and seas and resulting in a greater risk of disease transmission.

The correct management of wastewater does not just mean less waste of this limited resource, but also the protection<sup>28</sup> of the habitat surrounding us.

The **Accor Thalassa Hotel** in Essaouira in Morocco has installed its own wastewater treatment system.

In collaboration with the local authorities, **Grecotel** in Greece has installed a wastewater treatment plant that treats the water of the hotel and the local communities.

## 4.2.4. Landscape and biodiversity.

The Mediterranean Strategy for Sustainable Development puts forward within the concept of sustainable tourism the importance of protecting biodiversity and the conservation of natural spots, factors which are not usually considered in terms of national economies.

Looking after the environment is not only a moral imperative for all humans, it also contributes to promoting the company's image and to preserving the quality of the tourist destination.

<sup>&</sup>lt;sup>27</sup> For further information on this subject, see the manual produced by the UNEP, Division of Technology, Industry and Economics, 1998, "How the Hotel and Tourism Industries can Protect the Ozone Layer".

<sup>&</sup>lt;sup>28</sup> Example taken from The Center for Environmental Leadership in Business, Tour Operators Initiative for Sustainable Tourism Development, "Practical Guide to Good Practices: Managing Environmental and Social Issues in the Accommodations Sector"

This interest of the hotel sector can be translated both into concrete actions, such as cooperation with respect to a specific endangered species, or into the promotion of activities in which guests interact with their surroundings responsibly.

It is also important to provide guests with information on the natural parks they can visit or on protected species.

<sup>29</sup> In the **Sol Elite Falcó Club-Hotel** on the island of Menorca, **Spain**, ISO 14000 standard has been in place since 1998, certified by AENOR. The initiative was promoted by the hotel management and one of the measures taken consists of adapting the landscape by changing the plant species of the garden area for local species.

The reaction to these good housekeeping practices was positive at all levels: local population, staff, tourists and tourist companies.

## 4.2.5. Preserving the local culture.

One of the principles resulting from the Berlin Declaration (a document originating at the International Conference of Environmental Ministers on Biodiversity and Tourism, Berlin, March 1997), states the direct relationship between the preservation of and respect for the local culture, its products and the area's population. This declaration states "tourism should be developed so that it benefits local communities, strengthening the local economy, employing a local workforce and should be ecologically sustainable wherever it is, using local materials, local agricultural products and traditional skills." <sup>30</sup>

The Mediterranean Strategy for Sustainable Development also adds cultural criteria and includes among its objectives the reduction of social inequality, which in the tourism sector is possible by encouraging development that can promote social cohesion and cultural values.

Tourism should be a benefit to the local people, not a threat and therefore a relation of synergy is required between them. Tourism should work towards the incorporation of the local population, respecting the preservation of traditional culture.<sup>31</sup>

## 4.2.6. Odour pollution

It is clearly important to control odours and vapours that can be generated in the hotel. These may come from waste, the kitchens and other sources and are very annoying for guests. It is therefore important to comply with limits established by national legislation and to ensure the existence of appropriate filters and extractors. These should also be subject to regular inspections that ensure their optimum use is possible.

<sup>30</sup> Declaration of Berlin, International Conference of Environmental Ministers on Biodiversity and Tourism, Berlin, 6th – 8th March 1997.

<sup>&</sup>lt;sup>29</sup> Example extracted from http://eco-tip.org/T100\_e/t100\_e.htm

<sup>&</sup>lt;sup>31</sup> With respect to this point, the DAEDALUS project, sponsored by EUMEDIS and carried out in the year 2002, stands out. This project established a network for information on Tourism and Culture in the Mediterranean, combining national and regional sites. The Daedalus network enables all types of companies in the tourism sector in the Mediterranean to offer and request services, with particular emphasis on the participation of Small and Medium-Sized Enterprises. Tourists can also access this network to gain information. Daedalus is an interactive portal that offers broad tourist information, particularly of a cultural nature, for the participating countries (Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Tunisia and Turkey). For further information see http://www.eumedis.net/en/project/9

## 5. INDICATORS

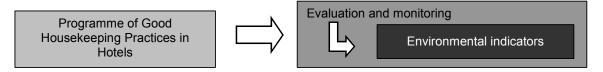
With the aim of carrying out the later evaluation and monitoring of the Programme's implementation and to check its real results, it is proposed that environmental indicators are used, independently of the legal requirements established in each case.

These indicators will allow us to obtain regular, clear and quantifiable figures for the environmental behaviour of the establishment and will serve as an instrument to evaluate the real impact of the application of the good housekeeping practices selected, based on the evolution of the results.

In addition, these can be an instrument for setting environmental objectives and their results can be used as an incentive for the hotel's employees and guests, as they show the real results of the hotel's commitment to the environment.

The indicators selected should have certain characteristics, such as ease of obtaining them, clarity and the possibility of obtaining regular, comparable figures. The aim is to obtain figures that are genuinely useful in attaining the environmental objectives set.

Two types of indicator should be set, on the one hand those related to training sessions and the communication elements and on the other, those related to the effective implementation of good housekeeping practices in the hotel and their real quantitative results. The indicators can also be absolute (e.g. total water consumption), or relative (e.g. water consumption per bedroom).



The use of the following indicators is therefore suggested for this Programme:

- 1. Indicators relating to training sessions and the communication elements. This will enable us to see the evolution of the application and the effects of the Programme on staff and guests:
  - Environmental training sessions held (number).
  - People trained as part of the Programme (number).
  - Employees trained within the total workforce (percentage).
  - Contributions and suggestions made by employees with respect to the Programme (number).
  - Consultations of environmental aspects related to the Programme, made by hotel guests (number).
  - Results of the questionnaires.
- 2. Quantitative indicators monitoring the implementation of the Programme. These will provide, through the regular collection of figures, real information and results concerning the effects that the Programme's application is having on the impacts of the establishment's activities on the environment:

#### Water consumption:

Water consumption represents one of the main impacts of hotels on the environment and therefore monitoring the effects that the application of the good housekeeping practices selected have on consumption is of major importance. Consumption figures will be collected that are as detailed as possible in order to be able to carry out a study of the evolution and the effects of the good housekeeping practices with respect to saving water. In this way, we can detect and analyse the variations that are produced and their causes. It is also useful to have an indicator of the economic saving that the reduction in water consumption attained represents for the company.

The following indicators are proposed:

- Total water consumption (in m³).
- Water consumption by department (in m³).
- Water consumption per overnight stay (in m³).
- Percentage of water reused (in %).
- Saving in the water bill (expressed in the local currency).

#### Waste production:

The generation of waste is inherent to the activity of every accommodation establishment, including the generation of wastewater. While taking into consideration the fact that the main objective is waste reduction, selection for later reuse, recycling or disposal is one of the main challenges that are the focus of good housekeeping practices.

The following indicators are proposed:

- Total quantity of waste (in kg).
- Quantity of waste per overnight stay or service (in kg).
- Quantity and type of waste by department (in kg).
- Quantity and type of waste by room (in kg).
- Quantity of waste by type of waste (in kg).
- Recycling rate: quantity of waste recycled / total quantity of waste (percentage).
- Cost of waste removal (absolute in local currency).

## **Energy consumption:**

The reduction in energy consumption is another of the aims of good housekeeping practices in hotels. The indicators will be closely linked not just to the good practices of clients and guests but also to the changes and improvements made with regard to devices and systems for lighting, air conditioning and other equipment that requires a supply of energy for its operation.

The following indicators are proposed:

- Total energy consumption used for the hotel's activities (in kWh).
- Relative consumption according to specific variables (k.o./service, overnight stay, season).

- Energy consumption by department (k.o./department).
- Quota by energy source (percentage).
- Quota by renewable energy source (percentage).
- Saving in the energy bill (in euros).

## Air pollution

Emissions into the air, although not of major importance in the case of hotel establishments, should be monitored as part of the results of the application of the good housekeeping practices and the improvements to the installations.

The following indicators are proposed:

- Total quantity of atmospheric emissions (absolute in m³).
- Details of emissions into the atmosphere, basically of nitrous oxide (NOx), carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO) (in percentage or ppm).
- The use of products with CFCs or HCFCs (kg/year).

## Noise pollution:

Noise from both interior and exterior sources can also be measured and in a hotel establishment they have a notable impact on the comfort of staff and clients.

The following indicators are proposed:

- Sound levels in different parts of the hotel (decibels).
- Soundproofed spaces as a proportion of the total (percentage).

#### Wastewater:

- Total quantity of wastewater (in litre).
- Quantity of wastewater that is reused (in litre).
- Quantity of wastewater treated (in litre).
- Physical-chemical composition of wastewater.
- Biological composition of wastewater.
- Cost of treatment of wastewater (in local currency by m<sup>3</sup>).
- Pollutant load treated (for example, according to Directive 91/271/EEC, by % of population equivalent with treatment of wastewater).

<sup>&</sup>lt;sup>32</sup> Index taken from the report written by the Spanish Ministry of the Environment, www.mma.es/info\_amb/indicadores/ pdf/AGUTratamientoAguasResiduales.pdf

## Complaints and legislation:

Finally, indicators based on existing regulations or on complaints and suggestions from hotel guests, can also be used.

The following indicators are proposed:

- Suggestions about environmental aspects (number).
- · Complaints about noise pollution (number).
- Complaints about bad smells (number).
- Environmental sanctions imposed (number).

# 6. **BIBLIOGRAPHY**

## **Publications**

- Agence de l'environnement et de la maîtrise de l'énergie, Délegation Aquitaine, (Ademe), région Aquitaine, Mon hôtel & l'environnement, imprimerie BM, Canéjan (33). http://www2.ademe.fr/servlet/getDoc?id=11433&m=3cid=96
- 2. Blasco Lázaro, María, *Qué se entiende por turismo sostenible*, First Conference on Sustainable Tourism, Aragon (2005)
- 3. Official Chamber of Commerce and Industry of Madrid, *Guía Práctica para la Gestión Medioambiental en Hoteles*. http://www.camaramadrid.es/asp/pub/pub.asp?p=2&id=50
- 4. International Conference of Environment Ministers on Biodiversity and Tourism, Berlin, March 1997.
- 5. *Mediterranean Strategy for Sustainable Development*, adopted by the Mediterranean Countries at the 14<sup>th</sup> Meeting of the Contracting Parties to the Barcelona Convention, held in Portoroz, Slovenia, November 2005, printed by Kontorousis Bros, *Athens* (2006).
  - European Commission, Eurostat, *Tourism- Europe, Central European Countries, Mediterranean Countries*, Luxembourg, Eur-Op, 2003 50 p.
  - Eur-Op catalogue n° KS-46-02-888-EN-C EN online version, 54 pages, Luxembourg, (2002). http://ec.europa.eu/enterprise/library/lib-tourism/index.htm,
- 6. Eurostat, *Tourism Trends in Mediterranean Countries*, Luxembourg: Eur-Op, 2000 59 p., Eur-Op catalogue n° KS-28-00-591-EN-C-EN EN
  - http://ec.europa.eu/enterprise/library/lib-tourism/index.htm online version, 29 pages.
- 7. Eurostat, *Tourism and Environment, Statistics in Focus, Industry, Trade and Services,* theme 4-issue 40- (2002).
  - http://epp.eurostat.ec.europa.eu/portal/page?\_pageid=1073,46587259&\_dad=portal&\_schema=PORTAL&p product code=KS-NP-02-040
- 8. Fundación Ecología y Desarrollo, *Guía de Buenas Prácticas Ambientales para Alojamientos Turísticos de la Hoya de Huesca,* Huella Digital, S.L., 126 pages, (2003). http://www.ecodes.org/pages/documentos/
- 9. United Nations Environment Programme. Division of Technology, Industry and Economics. Ozon Action and Tourism Programmes (UNEP), Multilateral Fund for the implementation of the Montreal Protocol, *How the Hotel and Tourism Can Protect the Ozone Layer*. 60 pages, First Edition (1998).
- 10. United Nations Environment Programme, (UNEP), Governing Council, "Background Paper for the Ministerial-Level Consultations on Energy and Environment for Development, Chemicals, Management as well as Tourism and the Environment", discussion papers presented by the Executive Director in the Ninth Period of extraordinary sessions of the Governing Council, Global Ministerial Environment Forum, Dubai, 7<sup>th</sup> 9<sup>th</sup> February 2006, item 5 c) of the provisional programme. 17 pages, distributed on 27<sup>th</sup> October 2005.

- 11. Mediterranean Action Plan, Eleventh Meeting of the Contracting Parties to the Barcelona Convention, Malta,  $27^{th} 30^{th}$  October 1999.
- 12. Recep Tayyip Erdoğan, *A vision of Tourism in Turkey for 2010 and the second period of action.* Declaration of the Prime Minister of Turkey in a press conference held in Istanbul (2004),
- 13. The Center for Environmental Leadership in Business, Tour Operators Initiative for Sustainable Tourism Development, *Practical Guide to Good Practices: Managing Environmental and Social Issues in the Accommodations Sector,* printed with the help of the Deutsche Gesellschaft für Technische Zusamennarbeit (GTZ) GmbH, 28 pages.
- 14. United Nations Environment Program (UNEP), World Tourism Organization (WTO), "Making Tourism More Sustainable: a Guide for Policy Makers. 210 pages., (2005). UNEP ISBN: 9280725076 Stock number: DTI0592PA,

http://www.earthprint.com/show.htm??url=http://www.earthprint.com/cgibin/ncommerce3/ProductDisplay?prrfnbr=592519&prmenbr=27973&cgrfnbr=

- 15. Universidad Empresa Medioambiental, University of Huelva, *Guía de Buenas Prácticas Ambientales Sector Turismo*, published by Fundación Biodiversidad, 167 pages, (2003).
- 16. World Tourism Organization, Seminar on Tourism Sustainability and Local Agenda 21 in Tourism Destinations and Workshop on Sustainability Indicators for Tourism Destinations, Final Report, Jeddah, Saudi Arabia, February 2006. Online version

http://www.world-tourism.org/sustainable/conf/jeddah.htm

#### Websites consulted

- 1. http://www.europa.eu.int/comm/environment/emas/index\_en.htm (information on EMAS on the European Union portal)
- http://www.conama.es/vconama/sd/aenor.htm,
   5<sup>th</sup> National Environment Congress, AENOR, Environmental Management in the Tourism Sector, Madrid, (2000)
- 3. http://mediambient.gencat.net/cat/el\_departament/actuacions\_i\_serveis/legislacio, Environmental legislation for Spain and Catalonia.
- 4. http://www.fundacionglobalnature.org/proyectos/tuismo\_y\_ma/proyecto\_visit.htm, LIFE VISIT project.
- 5. http://www.ecoestrategia.com/articulos/hemeroteca/hemeroteca.html, Economic and environmental forum.
- 6. http://www.legambienteturismo.it. Information on ecolabels, Legambiente turismo.
- http://www.icte.es, Institute for the quality of Spanish tourism, information on the Q Verde ecolabel.
- 8. http://www.greenglobe.org/ Information on the Greenglobe ecolabel.
- 9. http://www.ih-ra.com/programmes/index.php#bestPractices, International Hotel and Restaurants Association (IHRA in the creation of a Programme of Good Practices) since 2005, providing an on-line database for businesspeople.
- 10. Tool to help hotels develop their environmental policies.
- http://habitat.aq.upm.es/dubai/,
   Programme of Local Leadership and Good Practices. International competition organised by the Municipality of Dubai.
- 12. http://www.aiest.org/org/idt/idt\_aiest.nsf/,
  International Association of Scientific Experts in Tourism

- 13. http://www.world-tourism.org/, World Tourism Organization (WTO).
- 14. http://www.iso.org/iso/en/ISOOnline.frontpage, International Organization for Standardization
- 15. http://www.green-key.org/index.htm, Green Key Ecolabel for the tourism sector.
- 16. http://eco-tip.org/default.htm

  Tourism and Environment in Europe, Out of Practice, Back to Practice, page run by ECOTRANS.
- 17. http://www.eumedis.net/en/project/9, Portal of EUMEDIS on the Daedalus Project, (Delivery of Mediterranean Destination Links in Unified Environment)



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