

Project ENV98/338

Green Flag for Greener Hotels Green Flag for Greener Hotels



Foreword

The work reported here would not have been conducted without the support of the DG IX from the European Commission. It has also required numerous efforts from professionals that have accepted to participate the National Concertation Teams and review and comment the on going documents.

Be they all thanked here for their contributions of many kinds.

The opinion and positions reported in the present document represent solely those of the participants of the Consortium when a consensus was reached and those of the co-ordinator in the opposite situation. Neither themselves and their respective organisations nor the Commission itself can be held responsible for any damage that would occur consequently to any use of the present work.

Any use of the information contained in the report and resulting from this work should mention the contribution by the partners - ADEME, ARCS, CRES, ICAEN, IER & SOFTECH - and the financial support or the European Commission under the LIFE programme.

Objectives and Work programme

The present project aims at introducing an environmental qualities assessment of hotels in order to encourage them to improve some of their environment related characteristics such as energy consumption, water consumption, waste management, etc... Ecolabelling, even on a voluntary basis, appears as a powerful tool, both technical and sociological, to urge citizens to behave in a more environmentally respectful way. It is a "Green Flag" scheme similar to the "blue flag" procedure for seaside resorts.

This project is the logical continuation of activities carried by the members of the consortium in the field of energy in the hotel sector. Participating bodies are ADEME (FR), IER (DE), ARCS (AT), ICAEN (SP), CRES (GR), SOFTECH (IT), the co-ordination being assumed by ADEME.

Although primarily intended to foster energy conservation awareness among hotel managers, the environmental assessment method will address several environmental impacts through the following topics:

- · water and liquid waste
- waste management and use of recycled material
- · energy efficiency
- indoor climate (acoustic, light, thermal, indoor air quality)
- rural/urban planning
- integration in landscape
- · emissions of pollutants, acoustic nuisances to the surrounding
-

When ranking those various impacts a particular attention will be given to those domains that have a large influence on local equipment and facilities, especially when there is a strong seasonality: (water resources and water treatment, energy, ...) . One aim of the project is to establish minimal requirements in each domain with possible compensations or balance between some of them.

the project consists of two main parts:

- elaboration of a set of minimum requirements on a number of environment related issues and test on a limited number of hotels, 15-25 per participating country
- preparation of a voluntary Ecolabelling scheme Analysis and consideration of existing regional or isolated activities for ECO-labelling or similar in order to 1) make use of existing experience and 2) to improve existing schemes. Submission to a large number of hotels to evaluate acceptance and feasibility.

Expected results and dissemination activities

- Environmental assessment of a total sample of 70 to 100 hotels of all categories in different countries and their ability to meet specific environmental requirements
- A survey on barriers to environmental consciousness and the acceptance of an Ecolabelling scheme on a larger sample (100-200) on a national basis (country by country)

The important and necessary connection with tourism professionals is to be dealt with by constituting National Concertation Teams with experts and representatives of the hotel and tourism professional organisations. They will be able to provide an inside view and a good feed-back on the prepared work.

Assessment method elaboration

General specifications

The work has been conducted according to the following general specifications which are valid for any labelling initiative:

- Make optimal use of the experience of existing eco labels
- Work in close co-operation with sector representatives:
- Start with one or two product groups:
- Define the services provided by the selected product group in close relation with the professional themselves
- Choose a phased approach:
- Pay additional attention to a pragmatic approach to deal with regional and local differences:.
- Provide enough flexibility in standards to deal with differences in business and regions:
- Use a combination of mandatory standards and optional standards:
- develop quantitative standards where appropriate and feasible.
- Provide for clear link between the eco label and existing environmental initiatives
- Link the label to the wider process of sustainable tourism:.

We also wanted this ecological label to be incentive to take actions favourable to the environment and rewarding for those who had already. Thus it was decided to orient it towards a list of concrete technical specifications which would be complementary to other more managerial schemes (ISO 14000 or EMAS for example).

Report on existing initiatives

Most advanced initiatives as recorded to date are the following:

- DEHOGA scheme in Germany
- Hotel Label in Austria
- Tourist accommodation ecolabel in Luxembourg
- Green Keys in Denmark
- Nordic Ecolabelling in Scandinavian countries
- Catalan Emblem in Catalunya.

All these schemes are purely <u>voluntary schemes</u> but the initiative can come from the market (hotel sector and or hotel organisations as scheme managers) or from the Public Bodies (Government, Department of Environment...)

<u>Requirement scoring</u>: few method use complex scoring for requirements and when they do, in general there is no methodological support to the scoring which has been established by expert saying.

The question of fees is important:

- High fees are dissuasive
- Low fees are not sufficient for success

In general fees are not very high (Dehoga, Austria, Luxembourg...) but, as the schemes are at the beginning, they may not reflect the actual costs.

There are <u>different ways for hotel evaluation</u> and label awarding. Most cases see self-assessment by hoteliers but the label can be either:

- awarded by a jury decision. Checking is conducted afterwards on a random basis with on site visits.
- Or awarded following the on-site inspection by a referenced organisation

<u>Success is very limited everywhere</u> (<0,01% of hotel stock) but the reasons for this very low penetration rate are not easy to assess. One can suggest that:

- there is too little direct economic benefit for the hotel
- the fees are not a real problem but a good excuse
- implementation of measures may be rather difficult technically speaking or be inadequate with the normal operation of hotel (need a long period of closure...)
- The administrative procedures seem too complex

Method

The evaluation method elaborated at first was based on several principles:

- We made an inventory on all hotel services activities environmental impacts from a "walk through" approach by following the guest in his various steps within the premises.
- Flows as indicated on the following figure have been taken into consideration

electromagnetic perturbations influence of the flora and fauna surrounding land use lighi heat Interaction cultural integration Output waste electromagnetic sewage indoor air quality perturbation Input noise light smell air emissions heat energy carrier noise services water light other material heat smell Inside land use

Figure 1 : Structure of Environmental Aspects

Requirements and technical solutions were derived from each identified environmental effect or impact in order to propose a list of potential solutions that the hotelkeeper could or should implement.

Field tests

This first list of requirements was then field tested in each country in a set of volunteering hotels which was a way to verify the technical feasibility of the method and its applicability.

In each participating country a group of representatives from the hotel and tourism sector professional organisations and stakeholders has also been gathered under the naming of "National Concertation Team" (NCT) in order to get a more general feedback on the orientations of the project.

Reviewing and rewriting of the final requirements

From the field test and the reactions from the National Concertation Teams, many modifications have been introduced in the list of requirements:

- The "walk through" approach was dropped in favour of a more "classical" structure by environmental domains
- The number of requirements was reduced (from about 160 to 100) by grouping and multi choices questions
- All requirements were complemented with their respective checking principles
- Some requirements for which no general agreement was found between the 6 participating countries were abandoned
- Due to the rather poor knowledge of hotelkeepers relating to their water, energy or waste figures, quantitative requirements initially proposed were discarded. Their use should be re introduced in a future version of the method when requirements are updated and enhanced.

The final list of requirements has the following features:

Table 1 - Summary of Green Flag Requirements

Environmental Domain	Total scoring	Number of mandatory requirements
Water / Sewage	51	2 (including 0 under condition)
Energy	41	2 (including 1 under condition)
Waste	15	3 (including 2 under condition)
Purchasing	18	1 (including 0 under condition)
Air	13	0
Noise	9	1 (including 1 under condition)
General measures	21	2 + metering (including 2 under condition)

With the mandatory criteria has indicated in table 2

Table 2 - Mandatory criteria proposed in Green Flag

WASTE	Conditions
Waste sorting Which of the following waste categories do you collect and dispose separately (considering / referring national regulations)? paper / cardboard, glass; food residuals, other organic substances, plastic, aluminium, metal (mandatory for at least 3 categories, where separate collection is done at the local level)	Separate waste collection at local level
Waste sorting Do you give all fat and oil backlogs to special re-utilising companies?	Hotels with restaurant

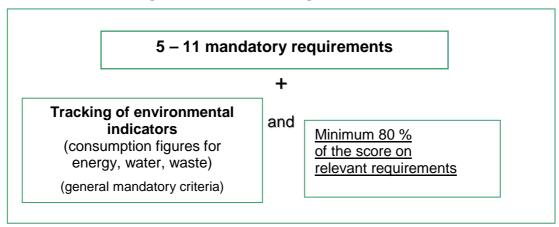
Hazardous waste Do you rest and dispose (record) the hazardous materials that occur during the operation of your hotel technically correct? Chemical detergents, Motor and machine oil, Paints and organic diluters, Pesticides, Fungicides, Cfc's products WATER	Conditions
Water saving	Conditions
Do you check (monthly) taps, showers and water cisterns for leaks?	
SEWAGE	Conditions
Waste water treatment If the hotel is not connected to the public sewage grid, does the hotel have on site sewage treatment system according to the European Standards (91/271/EEC)?	
NOISE	Conditions
Acoustic metering for noise reduction If you face noise pollution problems, which are caused from external or internal sources, have you metered potential indoors and outdoor sources of noise pollution such as nearby road with heavy traffic, noisy electric appliances, other sources?	Inside or outside acoustic pollution problems
ENERGY	Conditions
Energy saving Lighting energy saving: Where do you preponderantly use energy-saving lighting techniques (more than 50%)? Stair case/corridor, entrance/lobby, restaurant, outside, toilets in the guest area, guest rooms, other (mandatory minimum 2 areas) Energy saving	
Insulation of walls / ceilings (in case of new hotels): Does the hotel comply with the insulation requirements in the national building code for new buildings?	New hotels only
PURCHASING / USE OF PRODUCTS	Conditions
Reduction of resources consumption and waste At least one European Union or National Ecolabel product is MANDATORY among: consumables, appliances, tools, furniture, building finish products	
GENERAL REQUIREMENTS	Conditions
Do you record and report your water and energy consumption (by energy carrier) and your waste production? If yes, what are their values for the last past year?	Tracking of environmental indicators in the transition phase, then mandatory requirement
Coastal hotel only: Is the community in compliance with the "Blue Flag" or has the beach been granted the "Blue Flag" award? OR If there is a private heach, is the beach cleaning from waste (garbage, plastics, papers, aluminium)	Coastal hotel
If there is a private beach, is the beach cleaning from waste (garbage, plastics, papers, aluminium and glass) an everyday practice of the hotel? OR Do you provide beach furniture (deck chairs, umbrellas, bar stools,) of recyclable or natural	only
material (wood,)?	

Conservation areas (biotope, archaeological or historical,...) only: Are the hotel premises correctly integrated in the surrounding environment? VI) Is there any official document from local authority proving compliance with specific requirement regarding architectural integration of the building(s)? OR VII) Is the building maximum height less than twice the average of surrounding buildings (within 500 m)? OR VIII) Are the hotel premises built with the same features as the local traditional buildings (shape, building materials, roofing, wall coatings, colours)?

Labelling scheme proposal

The proposed labelling schemes has two main components: 1) the demand level on the list of requirements, 2) the administrative procedure proposed.

Figure 2 - Label awarding conditions



Administrative structure and step by step organisation (as presented on figure 3)

- 1 The national competent organisation, on behalf of the EC, is in charge of marketing the label
- 2 The hotel manager applies for the label. He implements a number of actions, according to the list of requirements. The national competent body provides technical assistance (documents, advising,...)
- 3 Self-evaluation: The List of requirements is complemented by the hotel
- 4 Experts check the responses and validate the answers
- 5 An on site control is conducted in order to cross check the application form.
- The label is delivered which means the hotel is authorised to use the logo for a period The National organisation is in charge of dissemination of the results by publishing lists of rewarded hotels. It could be a non-profit organisation like the one, which is in charge of the Blue Flag scheme for beaches.

Label duration

The validity of the label should not exceed 2 years, to the term of which the hotel should apply again.

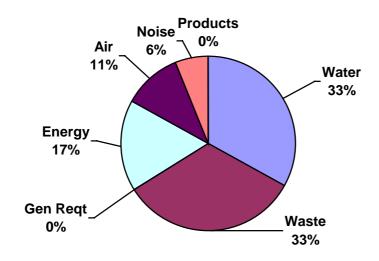
<u>Updating of requirements</u>

Every 2 to 3 years the list of requirements should be reviewed and updated to strengthen the specifications and to include improved knowledge. The dates for next reviewing must be announced at the time of each new release.

HOTELS National organisation (EC) Commissions Take part 1 2. Implement actions National competent organisation Hotel in the field of environment **federations** 3. Selfevaluation Gives a mission of checking and control of hotel application files **EXPERTS***

Figure 3 - Proposed administrative structure for the Green Flag

General acceptance evaluation



Perspectives and recommendations

The diffusion of National Eco-labels for the Hotel Sector within the different European countries shows that this kind of tool is not able to penetrate into this sector, notwithstanding its theoretical acceptance reported by the feasibility studies.

Considering that hotels, as all firms in the free market, are usually ready to introduce any change or innovation that rise their profit, the low diffusion of the hotel Eco-labels could be attributed to the absence (real or forecasted) of an economical return proportional to the investment required. This happens even in the countries where the labelling fees are very low.

It means that eco-labels are evaluated as unable to perform enough of any of the following options:

- 1. rising of the hotel turnover as number of guests and/or number of overnight stays.
- 2. rising of the hotel turnover as availability of the guests to pay highest fees,
- 3. reduction of the internal costs for the hotels activity,
- 4. reduction of the external costs for the hotels activity,

Points 1. and 2. are connected with the sensitivity of people to the environmental and health problems. At this moment, the number of tourists that give priority to these aspects when they choose a resort and an hotel (eventually paying somehow the environmental quality as higher fees or more distance from the seaside, etc.), is rather small, and the changing of their attitude depends on years of national and international education and promotion.

The reduction of the internal costs for the hotels - Point 3. - is connected mainly with the adoption of some measures on energy and water saving. The implementation of most of the other measures, on contrary, rise their direct/indirect internal costs.

Point 4. could be divided in two macro-categories:

- 4.a. The reduction of the costs of products and services provided by private firms will be possible only when – generally - products and services with low environmental impact will cost less than the other ones, at least on the EU market.
- 4.b. The reduction of the taxes and of the fees for the services provided by public bodies, could be decided at political level because of considerations on long term effects on people and economy.

To diffuse on a significant scale the European Eco-label for Hotels, it is necessary that National and local communities consider relevant for their environment, health and future development, the benefit provided by eco-labelled hotels and give them back compensation.

The overcoming of the above mentioned impasse, needs a start-up phase, lasting some years, and involving limited areas in each country.

Compensations have to be somehow related with the advantages for the communities and the pay-back time for the hotels.

To cope with some of the findings of this study, it seems that work at EU level is still necessary on three major aspects:

- Establishing benchmarking values
- Conducting a thorough study on the scoring system
- Analysing the marketing effect of the level of requirements.

Green Flag Project Participants



ADEME

Agence de l'Environnement et de la Maîtrise de l'Energie

500 Route des Lucioles Sophia Antipolis F - 06560 Valbonne, France

Contact: Hubert Despretz

** +33 . 4 . 93 95 79 44 fax +33 . 4 . 93 65 31 96
** despretz@ademe.fr



ARCS

Österreichisches Forschungszentrum Seibersdorf

A - 2444 Seibersdorf, Austria

Contact: Erwin Fugger

a +43 . 2622 . 69290-22 fax +43 . 2254 . 740 60

erwin.fugger@arcs.ac.at



CRES

Centre for Renewable Energy Sources,

19th km Marathonos Ave. GR - 190 09 Pikermi, Greece

Contact Artemios Chatziathanassiou

** +30 . 1 603 99 00 fax +30 . 1 603 80 06 ** atemis@cres.gr



ICAEN Institut Català d'Energia,

Av. Diagonal 453 bis àtic E - 08036 Barcelona, Spain

Contacts: Assumpta farran, Francesc Vidal

** +34 . 93 . 622 05 00 **fax +34 . 93 . 622 05 02 **edificis@icaen.es



IER

Institut für Energiewirtschaft und Rationelle Energieanwendung

Universität Stuttgart Heßbrühlstr. 49 a D - 70565 Stuttgart, Germany

Contacts: Christoph Weber

a +49. *fax* +49.

cw@ier.uni-stuttgart.de

Sven Eckardt

se@ier.uni-stuttgart.de



SOFTECH srl

Via Cernaia 1 I - 10121 Torino, Italy

Contact: Giorgio Gallo

** \begin{aligned} \begin{aligned} \begin{aligned} \begin{aligned} +39 \\ .011 56 22 289 \\ fax \end{aligned} \begin{aligned} +39 \\ .011 54 0219 \end{aligned} \end{aligned} \]

softech@softech-team.it