

ShMILE

Sustainable hotels in Mediterranean Islands and area



PRACTICAL HANDBOOK TO THE EU ECOLABEL CRITERIA FOR TOURIST ACCOMMODATION SERVICES

The aim of this handbook is to give a practical guidance about meaning of the EU Ecolabel criteria and to understand their meaning.

The criteria themselves are described in detail in the application materials and verification forms provided by the EU Commission and each national Competent Body (CB). However, the following handbook should give a practical access to the criteria and help to understand them correctly and undertake the necessary steps to comply with them.



Project co-funded by the European Union's
under the LIFE Environment Programme

November, 2006

1. ENERGY: ELECTRICITY FROM RENEWABLE SOURCES (RES)

“At least 22 % of the electricity shall come from renewable energy sources as defined in Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market”

This criterion is applicable to tourist accommodations having access to the free electricity market that offers electricity generated by renewable energy sources. According to Directive 2001/77/EC, renewable energy sources shall mean renewable non-fossil energy sources (wind, solar, geothermal wave, tidal, hydro power, biomass, landfill gas, sewage treatment plant gas and biogases).”

The applicant complies by:

- a) purchasing at least 22% RES electricity from a supplier (e.g. RECS)
- b) producing at least 22% RES electricity on-site
- c) producing less than 22% RES on site and purchasing the difference from a RES supplier

1. First step is to check if renewable energies are purchased (energy bill, contract)

Contact your power supply company or the municipality or the relevant Ministry to find out:

- if the power supply company that you are connected to its network, produces energy by renewable sources or/and
- if there is another company producing energy by renewable sources and if it is possible for your property to get connected with its network.

2. If no access to RES market than this should be communicated to the CB by simple statement.



2. ENERGY: COAL AND HEAVY OILS

“No heavy oils having a sulphur content higher than 0.2 % and no coal shall be used as an energy source.”

This criterion only applies to tourist accommodation that has an independent heating system.

In case coal and heavy oil are in use there must be a change to a less pollutant energy carrier such as oil light, gas, district heating or biomass.

Boilers for coke and coal can probably only be operated with these fuels. Boilers for heavy oil can normally be operated with light oil through only some changes in the burner and no additional investments.

However, in some cases only a new boiler can avoid the usage of coal and heavy oil and investments might be necessary. Consideration should be given to solutions which do not only decrease emissions but improve also operating costs, comfort and which do not require the change of the entire heating system such as:

- Gas boilers
- Condensing boilers
- Heat pumps
- CHP (Combined Heat and Power Systems)





3. ENERGY: ELECTRICITY FOR HEATING

“At least 22 % of the electricity used for heating rooms and sanitary hot water shall come from renewable energy sources as defined in Directive 2001/77/EC.”

This criterion only applies to tourist accommodation that has an independent electrical heating system and has access to a market that offers energy generated from renewable energy sources.

1. **In a first step** the accommodation has to check if an independent heating system is operated, which means if the manager has a direct influence on the energy carriers used. In case the premise is connected to a district heating systems the criterion does not apply.
2. **In a second step** the manager has to verify if the heating systems for rooms and the hot water system are operated with electricity. Often electricity will be used for hot water only. In some cases air condition units are used to heat rooms.
3. **In a third step** the manager has to contact the energy provider and ask for electricity which originates at least from 22% of renewable energy sources. Some energy suppliers already publish their sources or document it in the energy contract or the invoice. In case no information is available it is the challenge of the manager to contact the energy supplier, to make sure that at least 22% electricity from renewable energies are delivered and to get a document in which this is stated. In case the supplier does not supply sufficient renewable electricity it is necessary to:
 - a) purchase at least 22% RES electricity from a different supplier
 - b) produce at least 22% RES electricity on-site
 - c) produce less than 22% RES on site and purchasing the difference from a RES supplier





4. ENERGY: BOILER EFFICIENCY

“The efficiency of any new boiler (heat generator) bought within the duration of the eco-label award shall be at least 90%, as measured according to Council Directive 92/42/EEC of 21 May 1992 on efficiency requirements for new hot water boilers fired with liquid or gaseous fuels, or according to relevant product norms and regulations for those boilers not covered by this Directive.

Hot-water boilers fired with liquid or gaseous fuels as defined in Directive 92/42/EEC shall comply with efficiency standards as stated in the Directive. The efficiency of boilers excluded from Directive 92/42/EEC shall comply with the manufacturer’s instructions and with national and local legislation on efficiency.”

The requirements of this criterion involve purchasing of boilers (heat generators) of high efficiency ($\geq 90\%$) rated according to Council Directive 92/42/EEC in order to reduce energy consumption and CO and CO₂ emissions to the atmosphere.

For boilers excluded from the Directive, their performance must be similar according to product norms and national regulation.

The criterion applies **only for the new boilers** purchased for the time-period the accommodation facility is awarded with the eco-label.

The following boilers are excluded from this criterion: hot-water boilers capable of being fired by different fuels including solid fuels; equipment for the instantaneous preparation of hot water; boilers designed to be fired by fuels the properties of which differ appreciably from the properties of the liquid and gaseous fuels commonly marketed (industrial waste gas, biogas, etc); cookers and appliances designed mainly to heat the premises in which they are installed and, as a subsidiary function, to supply hot water for central heating and sanitary hot water.”





5. ENERGY: AIR CONDITIONING

“Any air conditioning system bought within the duration of the eco-label award shall have at least Class B energy efficiency as laid down in Commission Directive 2002/31/EC of 22 March 2002 implementing Council Directive 92/75/ EEC with regard to energy labelling of household air-conditioners, or have corresponding energy efficiency.”

Note: This criterion does not apply to air-conditioners that are either appliances that can also use other energy sources, or air-to-water and water-to-water appliances, or units with an output (cooling power) greater than 12 kW. The air conditioning devices covered are Room Air Conditioners (RACs), which include single-packaged units, split-packaged units, multi-split packaged units, and single-duct air-conditioners. They exclude spot air-conditioners, dehumidifiers, close-control air-conditioners, evaporative coolers and desiccative coolers.

In case an accommodation needs an air conditioner with less than 12 kW an energy efficient device must be purchased. Mainly devices will be purchased which substitute old plants. Therefore the power rate is known.

The criterion applies only for the new air conditioning systems purchased for the time-period the accommodation facility is awarded with the eco-label.

Following the EU energy label, room air-conditioners are graded on a scale from A-G, where A represents the best equipment that is widely available, and G the worst. The performance is generally measured using an energy efficiency ratio (EER), where

$$\text{EER} = P_c / P_e$$

P_c is the cooling capacity of the air conditioner and P_e is the electrical consumption, both measured in kW. Both figures are given on the air conditioner.





6. ENERGY: WINDOW INSULATION

“All windows in rooms shall have an appropriately high degree of thermal insulation according to local climate, and shall provide an appropriate degree of acoustic insulation.”

1. If all guest room windows in the accommodation are double glazed, or with equivalent insulation, a declaration to this regard is sufficient, stating the type of insulation and when it was installed.
2. If you do not have insulated windows, you will need to prove that, in your specific climate zone and location, no acoustic and thermal insulation is necessary, or that the existing windows do guarantee enough protection in order to avoid thermal dispersion and/or acoustic pollution. The information you will have to provide (either from own observation or by the local meteorological station, weather office or similar institutions) can be summarized as follows:
 - **Temperature.** Table with average temperatures for every month
 - **Sun radiation.** Average sunny days for every month
 - **Wind.** Which is the dominant wind?
 - **Microclimate conditions.** This relates to mountains (wind barriers) and water (humidity) in the surrounding
 - **Protection against solar radiation in summer.** Are there shading devices?

Protection against noise. Are there sources of noise in the surroundings of the rooms which could disturb guests, such as busy roads, train lines, airports. The noise level should not be superior to 30 db(A).





7. ENERGY: SWITCHING OFF HEATING OR AIR CONDITIONING

“If the heating and /or the air conditioning is not automatically switched off when windows are open, there shall be easily available information reminding the guest to close the window(s) if the heating or air conditioning is on.”

The most logical place to remind guests to switch off heating or air condition when keeping open their windows is certainly near windows. The information should also be present in the general documentation available to guests.

Another good idea is also to talk to guests when accompanying them first to their room, and showing them where the switches for the heater and/or air conditioners are, asking them to please switch the system off if they keep open their windows as this does not happen automatically.





8. ENERGY: SWITCHING OFF LIGHT

“If there is no automatic off switch for the light(s) in the room, there will be easily available information to the guests asking them to turn off the lights when leaving the room.”

There are several places where guests can be reminded of switching off the lights in their rooms before leaving them. The most logical location is a reminder near the exit door.

The information should also be present in the general documentation available to guests.

Another good idea is also to remind guests of the need to switch off lights when accompanying them first to their room, and showing them where the switches are.



9. ENERGY: ENERGY SAVING LIGHT BULBS

Part A

“Within one year from the date of application, at least 60% of all light bulbs in the accommodation shall have an energy efficiency of Class A as defined in Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps. This does not apply to light bulbs whose physical characteristics do not allow substitution by energy saving light bulbs.”

Part B

“Within one year from the date of application, at least 80% of light bulbs that are situated where they are likely to be turned on for more than five hours a day shall have an energy efficiency of Class A as defined by Directive 98/11/EC. This does not apply to light bulbs whose physical characteristics do not allow substitution by energy saving light bulbs.”

The aim of this criterion is to reduce electrical consumption by using energy saving light bulbs, especially in those places where they are likely to be on for more than 5 hours a day.

1. The first step is a review of existing lamps and bulbs in use. In practice this means counting existing type of bulbs and operating time. As different areas might require different bulbs it makes sense to prepare documentation for main different areas such as rooms, floor, restaurant, outdoor area, kitchen, back office.

On the basis of an initial review, the accommodation has to plan how to achieve

- 60% of energy efficient lamps within one year and
- 80% of energy efficient lamps for areas, which have lights switched on at least 5 hours/day.

It is recommended to start changing light bulbs which are at the end of their life time:

Incandescent lamps should be replaced by compact fluorescent lamps with the same lighting output but with lower Wattage. This helps to reduce electricity costs.

Old tubular lamps of 38 mm diameter should be replaced with 26 mm diameter lamps as they have a better colour and a 10% decreased electricity consumption

Incandescent spot lamps should be replaced by halogen (LED) lamps



10. ENERGY: SAUNA TIMER CONTROL

“All sauna units shall have a timer control.”

Sauna timer controls are technically easy to install and to operate. In case a sauna does not have a time control it is obligatory to install such a device and operate it.





11. WATER: WATER SOURCE

“The accommodation shall declare to the water authority its willingness to switch to a different water source (e.g. mains water, surface water) if local water protection plan studies show evidence of a high environmental impact from using its current source of water.”

If the accommodation is connected to main water sources than this criterion is not applicable

In case the accommodation is not connected, the business shall:

- Inquire from the local or regional authorities if there are any studies on the environmental impact of water catchments from the source your business is using.
- If any of these studies shows the environmental impact is high, please send a declaration to the water authorities that expresses your willingness to change water source according to an alternative provided.





12. WATER: WATER FLOW FROM TAPS AND SHOWERS

“The water flow of the taps and showers shall not exceed 12 litres/minute.”

The first step to measure the current water flow of taps and showers. It is recommended to take a flow meter for this experiment. Otherwise you can take a small bucket and a watch to have an indication of the flow per minute.

You have to make sure that the same measurement is applied for all taps and showers (excluding those for bathtubs).

In case the taps and showers do not comply there are several technical possibilities:

- Install (pressure independent) flow reducers
- Areators
- Decrease water pressure in the net





13. WATER: WATER SAVING IN THE BATHROOM AND TOILETS

“In the bathroom and toilets there shall be adequate information to the guest on how to help the accommodation save water.”

1. Identify the best ways in which the guest can help your accommodation to save water according to the technical features of the bathroom taps and showers and WC flushes; Accordingly adequate bathroom taps, showers and WC flushes must be installed
2. Provide adequate information to the guest on how he can help the accommodation save water in the bathroom and toilets;
3. Provide a declaration of compliance with this criterion including the text of the information given to the guest stating where such information is situated in the accommodation.





14. WATER: WASTE BINS IN TOILETS

“Each toilet shall have an appropriate waste bin and the guest shall be invited to use the waste bin instead of the toilet for appropriate waste.”

The best ways in which guests can help the accommodation to separate waste must be identified. Accordingly adequate bins must be installed in toilets and information should be provided to the guest on how he can assist the accommodation to separate waste.

Therefore you have to:

- Provide each toilet with an appropriate waste bin.
- Communicate, in an appropriate way, the invitation to use the waste bin instead of the toilet for waste disposal





15. WATER: URINAL FLUSHING

“Urinals shall have an automatic or manual flush such that no more than five urinals shall be flushed together.”

The accommodation manager shall ensure that urinals have a manual flush or an automatic one which does not activate more than five urinals at a time; provide a declaration of compliance with this criterion, including relevant documentation on the urinals installed.





16. WATER: LEAKS

“Staff shall be trained to check every day for visible leaks and to take appropriate action as necessary. The guest shall be invited to inform the staff of any leaks.”

The accommodation manager shall:

- Include training on the importance of fixing leaks including special attention as to where one could look for leaks. Leaks often happen at water taps, toilets, urinals, heating system, cooling system.
- Have easy procedures so that staff or the responsible person can activate the necessary measures for having leaks fixed. This means that at least one staff is responsible for repairing leaks.
- Have adequate communication to the guest inviting him to make staff aware of any visible leaks.





17. WATER: CHANGING TOWELS AND SHEETS

“The guest shall be informed of the environmental policy of the tourist accommodation whereby sheets and towels shall be changed either at his or her request, or by default once a week for lower class accommodation, and twice a week for higher class accommodation.” Lower class accommodation is 1-2 stars or equivalent. Higher class is 3-5 stars or equivalent.”

The accommodation manager shall provide adequate information (whether in the guest information brochure, directly displayed in the bathroom for the towels, cards to be placed on the bed when changing of the sheets is required so that guest have actively to do something when changes are needed, at the reception at arrival, welcome events performed) to the guest about the environmental policy of the tourist accommodation and ask him to contribute to perform this environmental policy. The communication to the guest shall inform him on the environmental policy of the accommodation and invite him to contribute to the respect of that policy accepting that the change of towels and sheets is made only on his request.

Sheets and towels shall be changed on the request made by guests but with a frequency not higher than quality standards applicable to the tourist accommodation.

A second area of concern is that staff members have to be trained to change towels and sheets only on request. Practise shows that often staff members are used to change towels and therefore this information has to be provided in the staff training.





18. WATER: WATERING PLANTS AND GARDENS

“Flowers and gardens shall normally be watered before high sun or after sunset, where regional or climatic conditions make it appropriate.”

The accommodation shall:

- Determine procedures, if necessary, by which flowers and plants in outside gardens shall be watered during the coolest part of the 24 hours. In case automatic watering devices are installed, these have to work in the night-time. In case gardens are watered manually, this must happen after sunset and before sunrise.
- Ensure that any automatic watering device shall be regulated so that it does not spoil water (for instance that it does not work after or during rain) and that it only works during the appropriate hours.

Watering plants should be also covered in staff training.





19. WATER: WASTE WATER TREATMENT

“All waste water shall be treated. If no link is possible to the local sewage treatment plant, the tourist accommodation shall have its own treatment system that meets the requirements of relevant local, national or European legislation.”

The accommodation manager must enquire about being linked to the local sewage treatment. In case this does not happens, it must guarantee the proper functioning of its individual waste water treatment.





20. WATER: WASTE WATER PLAN

“The accommodation shall ask the local administration for its waste water plan and if there is one will follow it.”

The applicant shall provide the letter to the local waste water management requesting the local waste water design plan and the reply received. If there is a plan, the applicant shall provide documentation on the steps taken to follow it:

1. Enquire in written form to the local authority if there is a waste water plan;
2. Show the respond (write a registered letter; no respond after 2 months it is ok)
3. Follow such a plan, if any;
4. Provide the letter sent to the local waste water management department requesting the waste water design plan;
5. Provide documentation on the steps taken to follow the waste water plan, if any.





21. DANGEROUS CHEMICAL SUBSTANCES: DISINFECTANTS

“Disinfectants shall be used only where necessary in order to comply with legal hygiene requirements.”

In a first step it is necessary to identify the quantities of disinfectants already in use.

In a second step it will be necessary to evaluate if there is any national or local legal requirements dealing with the use of disinfectants. The chamber of commerce will normally give this information. The most important topic is not to overdose disinfectants and to reduce their usage as much as possible as these liquids harm the environment.





22. DANGEROUS CHEMICAL SUBSTANCES: STAFF TRAINING ON DISINFECTANT AND DETERGENT USE

“Staff shall be trained not to exceed the recommended amount of detergent and disinfectant indicated on the package.”

Where there are no other people in staff responsible for this, the owner shall be responsible for this task and demonstrates compliance with the criterion. Evidence of training & operating procedures in relation to cleaning regimes and dosing is required.





23. WASTE MANAGEMENT: WASTE SEPARATION BY GUESTS

“Adequate receptacles shall be provided to allow guests to separate waste according to local or national systems. Clearly available information in the rooms shall invite the guests to separate their waste”

1. The first step will be to decide, which waste can be collected separately in the areas dedicated to guests (rooms, bar, restaurant, lounge, fitness areas, beach, disco etc). This decision will depend to the local dispositions and facilities. Usually, this is at least glass, paper and plastic.
2. When you have established the different types of waste you will be able to collect in the guest rooms and areas, you will need to acquire appropriate receptacles for the waste, meaning they should be easy to label, easy to reach, and easy to handle by the cleaning staff, and obviously be compliant with the existing safety/hazard regulations.
3. Elaborate short and simple documentation describing the type of waste to be collected and the container destined for it. Take care that this information is clearly visible in the relevant areas.



24. WASTE MANAGEMENT: HAZARDOUS WASTE

“The staff shall separate hazardous waste as listed in Commission Decision 2000/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste and its subsequent amendments, and appropriate disposal shall be sought. This includes toners, inks, refrigerating equipment, batteries, pharmaceuticals. If the local authority does not provide disposal of hazardous waste, the applicant shall, every year, provide a declaration from the local authority that there is no hazardous waste disposal system in place.”

The common hazardous waste are toners, inks, acids, adhesives, air conditioning refrigerants, automobile supplies, batteries, drain cleaners, disinfectants, dyes, glues, grease and rust solvents, lawn products, metal cleaners, polishes, medicines, paints, paint thinner, pesticides, oven cleaners, wood preservatives, wood cleaners, polishes.

1. The first thing to do is the identification of hazardous waste. A full list can be delivered by the local chamber of commerce or enquiring Commissions Decision 91/689/EC and study Annexes I and III
2. Label special containers according to the types of hazardous waste you have identified.
3. Store hazardous waste indoors or in a covered area to prevent moisture from seeping in. Containers should be kept away from the rest of the waste and away of the visitors' areas.
4. The next thing to do is training the staff on the separation of the waste and the protection measures that they should apply while handling them. The staff should separate the hazardous waste in the special labelled containers (boxes, bags or litter cans).
5. Search for a contractor that will collect and dispose/treat the hazardous waste with environmentally sound methods. You could contact your municipality or county to acquire information on that issue.
6. Guests should be informed where to disposal hazardous waste (such as batteries, medicines). This could happen at the reception area.



25. WASTE MANAGEMENT: WASTE SEPARATION

“The staff shall separate waste into the categories that can be handled separately by the local waste management facilities. If the local administration does not offer separate waste collection and/or disposal, the accommodation shall write to them expressing their willingness to separate waste, and expressing their concern about the lack of separate collection and/or disposal.

The request to local authorities to provide separate waste collection and/or disposal shall be made yearly.”

A few initiatives necessary to examine the firm’s waste output:

- Conduct a waste audit to discover what materials are discarded as waste or for recycling, and in what quantities.
- Sort and weigh representative samples in various locations according to product and package type.
- Examine waste-hauling records to assess weight and/or volume of waste.
- Assemble waste composition data into categories of products and packaging to help identify major sources of waste.

The output should be a list of different waste types. Research the offer of recycling facilities of the local waste management authorities. Ideally, such information should be easily accessible, on the municipality’s website or publications, in public areas or the municipal waste collection area.

Before employees begin collecting materials and placing them in recycling containers, provide training on procedures for preparing materials. Check with your local authority as to the degree of preparation and sorting of materials required.





26. WASTE MANAGEMENT: WASTE TRANSPORTATION

“If the local waste management do not collect waste at or near the tourist accommodation, the latter shall ensure transportation of its waste to the appropriate site, reducing transport as far as possible.”

1. Information has to be gathered regarding the local facilities where waste is collected, and if/when transportation of the waste from the accommodation to those sites is possible.
2. If the authorities communicate that they will not collect the waste directly from the accommodation, the next step is to inquire regarding the nearest collection point where the waste can be brought and stored/disposed of safely and without risk and disturbance. Once you are in possession of this information, you need to organize transportation of the waste.
3. Document every step of this process: waste audit, selection of means of transportation, responsible staff, quantity and type of waste transported, frequency of waste transportation, distance of transportation, receipt by the waste disposal/recycling facility.





27. WASTE MANAGEMENT: DISPOSABLE PRODUCTS

“Unless required by law, none of the following disposable products shall be used in rooms and restaurants:

- *“one-portion” or “one-use” toiletries (such as shampoo, soap, shower caps, etc...),*
- *cups, plates and cutlery.”*

The common disposable products used and sources of waste are:

Shampoo, soap, shower caps, toothpastes, Bath & Shower gel, conditioners, lotions, cups, plates, cutlery

If there is a legislation for one of the above mentioned products you are not obliged to apply for this criterion, An example for this is that in some countries glass cups are not allowed in pool and recreation areas due to safety reasons and therefore plastic cups must be used. However, for all other areas in the accommodation plastic cups are forbidden.





28. OTHER SERVICES: NO SMOKING IN COMMON AREAS

“A no smoking section shall be available in common areas.”

Common space is defined as areas, which are used by everyone – the front hall, spaces for leisure and dining, bathrooms, canteen, corridors, meeting rooms.

If not already required by national laws it is necessary to create smoke free areas.

In order to implement the criteria, owners of tourist facilities must:

- Prepare written information concerning rules about smoking at the facility; inform guest about the non-smoking policy of the accommodation
- Place “no smoking” signs in rooms where smoking is not permitted (see Image 1);
- Establish specially designated areas outside of common use facilities (these can be outdoors) for smokers, clearly marking them as places where smoking is permitted (as in Image 1, but without the cigarette crossed out);
- Ensure that in facilities for smokers there are ventilation, ashtrays and their emptying as needed, and isolation from other rooms.





29. OTHER SERVICES: PUBLIC TRANSPORTATION

“Information shall be made easily available to the guests and staff on how to reach the accommodation and other local destinations by public transport. Where no appropriate public transport exists, information on other environmentally preferable means of transport shall also be provided.”

In order to put this criterion into practice, the owners or employees of tourist facilities may prepare information in the following ways:

- On Web homepage Arrival / Departure information with public transports
- In leaflets, brochures information about local transportation
- Link to national railway / bus companies
- Organise transfers from/to the accommodation from nearest public mean of transport





30. MANAGEMENT: GENERAL MAINTENANCE AND SERVICING

“All equipment used to provide the tourist accommodation service shall be serviced and maintained in compliance with the law and when otherwise necessary, and any work shall be carried out by qualified personnel only.

Of the equipment included in the criteria, the accommodation manager shall have a written declaration from the appropriate technician on the frequency with which the law requires maintenance checks.”

Generally said all plants and machinery in use have to be serviced on a regular basis (yearly) by skilled technicians so that malfunctions and efficiency losses can be excluded.

The following devices need to be serviced

- Heating (except boilers which is covered under 31): Servicing include deaerate of the tube system, test temperature sensor's in the individual areas, check thermostat valves;
- Ventilation and air conditioning equipment (HVAC): including heat pumps, thermoregulation devices etc; Servicing include check of losses of refrigerators, cleaning of cooling tubes. In some countries yearly expectations are legally required.
- Equipment: refrigerators, Cooling plants: Servicing include items such losses of refrigerants,
- Washing machines: Servicing include cleaning of filters and de-liming, regulating the dosage-system
- Dishwashers, Servicing include cleaning of filters and de-liming, regulating the dosage system
- Office equipment whether household or professional; Servicing include cleaning
- Rainwater collecting and water recycling systems; cleaning
- Water using equipment (dishwashers, washing machines)
- Swimming pool and other fitness equipment: Check of functionality and dosage of chlor, cleaning of filters
- Fat/oil filters: Regular cleaning and emptying
- Coffee machines:
- Maintenance of pipes





31. MANAGEMENT: MAINTENANCE AND SERVICING OF BOILERS

Part A

“Maintenance and servicing of boilers shall be carried out at least yearly, or more often if so required by law or need, by appropriately qualified professionals, following CEI and national standards where these apply, or according to the manufacturer’s instructions.”

Part B

“Testing that the efficiency levels, as defined by Directive 92/42/EEC or national legislation or the manufacturer’s indications, are met and that emissions are within legal limits shall be carried out once a year. If maintenance tests show that the above conditions are not met, corrective action shall be promptly taken.”

1. First it is necessary to check which boilers are in use. Typical liquid or gaseous fuels boilers are
 - Low temperature boilers
 - Gas Condensing boiler
 - Oil Condensing boilers
 - Standard boilers are

If no boiler is in use, e.g. because the accommodation is connected to district heating, if heat pumps are in use, if the accommodations uses electricity for heating purposes, this criteria is not relevant.

2. In a second step it is necessary to identify relevant legislation or recommendations to service this boiler. Typical source of information are technical manuals and manufacturer recommendations. In practice, installation companies will also take care about servicing. Boilers have to be serviced at least once a year. Therefore the owner has to make sure that a professional organisation, which is allowed to service and maintain the boiler, takes care about servicing.
3. In a third step the accommodation must be sure that the boiler has to be serviced. A good way to do so is to include the boiler in the list of equipment to be serviced regularly





32. MANAGEMENT: POLICY SETTING AND ACTION PROGRAMME

“The management shall have an environmental policy and shall draw up a simple environmental policy statement and a precise action programme to ensure the application of the environmental policy

The action programme shall identify targets on environmental performance regarding energy, water, chemicals and waste that shall be set every two years, taking into consideration the optional criteria. It shall identify the person who will act as the environmental manager of the accommodation and who is in charge of taking the necessary actions and reaching the targets. Comments and complaints from guests shall be invited and taken into account.”

An environmental policy is a statement by a company of its principles and intentions in relation to its overall environmental performance. It establishes the overall direction and provides a framework for action for the development of specific environmental objectives and targets.

The following areas should be covered at least in an environmental policy:

- General principles
- Environmental responsibility
- Establish systems to ensure full control
- Continuous improvement of environmental performance
- Work towards achievement of sustainable development
- Strategy and Planning
- Consider environmental issues in investment, policy and practice
- Minimise environmental impacts of services
- Influence suppliers and customers
- Technology / Products / Services
- Minimise resource consumption
- Prevention of pollution
- Commitment to recovery and recycling as opposed to disposal where feasible
- Reduction in packaging
- Minimise environmental effects in use and disposal
- Legal Compliance
- Compliance with local environmental standards
- Training and Communication
- Train staff in the environmental aspects of their work
- Share environmental experience
- Advise customers and distributors in transportation and storage
- Encourage open dialogue with employees, customers and stakeholders





Programme

The environmental programme should focus on actions to improve the environmental situation on site and may focus on energy, water, chemicals and waste.

The programme should consider:

- a clear description of the action,
- the aim and purpose of the action,
- the person/department responsible for carrying out the action,
- the budget,
- personnel resources / training needed,
- a deadline for completion

Procedure taking into account input from guests

There are several possibilities taking into account input from guests.

The main areas to clarify are:

How to collect input from guests; Guest feedback can be collected easily with questionnaires. The main advantage is that guests are already used to questionnaires in accommodation services and campsites and do voluntarily fill in these documents in case they have time. Questionnaires may already been in place and therefore additional questions regarding the environmental performance of the accommodation can be included. Another opportunity is to name a contact person, e.g. at the reception. A third opportunity may be a guest book, which can be found at the entrance hall.





33. MANAGEMENT: STAFF TRAINING

“The tourist accommodation shall provide information and training to the staff, including written procedures or manuals, to ensure application of environmental measures and to raise awareness on environmentally friendly behaviour. Adequate training shall be provided to all new staff within four weeks of starting employment and for all staff at least once a year.”

You will have to organize lessons for your staff on the following issues:

ENERGY

General Management and Maintenance staff

- Electricity: free electricity market and renewable resources. Directive 2001/77/EC and local legislation on the topic;
- Servicing, legal maintenance requirements for different types of Heating, ventilation and air conditioning (HVAC), including the one which belongs to the accommodation;

Maintenance staff

- Heating, ventilation and air conditioning (HVAC);
- functioning, CO₂, CO, Nox production; environmental impacts deriving from poor servicing and maintenance;
- efficiency: elements which influence efficiency, most efficient types of HVAC;
- Insulation: wall and window insulation: different types of windows and insulation and consequences of good/poor insulation;
- Thermoregulation: most efficient levels of base temperature, heat dispersion with respect to outside walls and insulation;
- Energy efficient light bulbs;
- Energy efficient equipment. Energy Class, energy star;
- Energy production from renewable sources: solar heat, photovoltaic generation.





WATER

All staff

- Water: the water cycle, the most recent causes for water shortage and its implications;

Maintenance staff

- Waste water treatment – influence of oils and detergent foam in waste water plants;

Maintenance and housekeeping staff

- Leaks: the importance of fixing them immediately (how many liters to one-drop leak for one day);
- Effects and types of flow reducers;

Housekeeping and administration staff (reception and marketing)

- Respecting the willingness of the guests to keep sheets and towels;
- Different ways to save water in the bathroom;

Housekeeping staff

- Ways to save water during cleaning activities;

Maintenance staff

- Rainwater use and recycling of water;

CHEMICAL SUBSTANCES

Housekeeping staff

- Detergents and disinfectants: consequences on the environment;
- Best types of detergents and practices for minimal use;

WASTE MANAGEMENT

All staff

- Waste reduction and separation (in the office, the kitchen, other as appropriate);
- Recycling of different types of waste;

MANAGEMENT

General management and administration staff

- Management;
- Eco-label criteria and scheme, environmental certification;
- Communication to the guests on the environmental commitment of the accommodation;
- Follow up on consumer questionnaire on environmental services





34. MANAGEMENT: INFORMATION TO GUESTS

“The tourist accommodation shall provide information to guests, including conference participants, on its environmental policy, the actions taken and the EU eco-label. Information shall be actively given to the guests at the reception and notices inviting guests to support the environmental objectives shall be visible to the guests, especially in their rooms.”

Clients of tourist accommodations must be informed, if relevant, about the following:

- Environmental policy and main activities of the tourist accommodation service to reduce negative environmental effects
- Information about non smoking areas
- Bicycle rental possibilities
- Information on the European Eco-Label and motivate guest to support activities
- Information on biological diversity and activities to protect the environment around the hotel
- Closing windows in case heating or air condition is switched on
- Switch off lights when leaving the room
- Save water
- Dispose waste in waste bins and not in toilets
- Inform staff in case of leaks or obvious losses
- Information, that towels and sheets will be changed once (or twice) a week or on request
- Separate waste and use waste bins for different waste types
- Information about arrival with public transport
- Information about public transport on site and in the region
- Compliance and improvement proposals for environmental behaviour should be directed to Mr. / Mrs...
- Invite guest to support environmental friendly behaviour of the hotel





35. MANAGEMENT: ENERGY AND WATER CONSUMPTION DATA

“The tourist accommodation shall have procedures to collect and monitor data on the overall energy consumption (kWh), electricity consumption (kWh), energy used for heating (kWh), and water consumption (litres).”

Data shall be collected with every bill received, or at least every three months, and shall also be expressed as consumption per overnight stay and per m² of indoor area.

The accommodation shall report the results yearly to the CB that has assessed the application.





36. MANAGEMENT: OTHER DATA COLLECTION

“The tourist accommodation shall have procedures to collect and monitor data on consumption of chemicals (grams of dry substance) and the volume of waste produced (litres and/or Kg of unsorted waste). Data shall be collected at least every six months, and shall also be expressed as consumption or production of overnight stay and per m² of indoor area. The accommodation shall report the results yearly to the Competent Body that assessed the application.”

When the quantity of chemicals is not available in grams of dry substance, the applicant shall indicate the quantity expressed in kg and/or litres specifying if the product is concentrated or not.





37. MANAGEMENT: INFORMATION APPEARING ON THE ECO-LABEL

“Box 2 of the eco-label shall contain the following text:

- Measures taken to save energy and water*
- Measures taken to reduce waste*
- General environmental improvement”*





38. ENERGY: PHOTOVOLTAIC AND WIND GENERATION OF ELECTRICITY

“The tourist accommodation shall have a photovoltaic system or wind power electricity generation that supplies or will supply at least 20% of the overall electricity consumption per year.”

The first thing to do is to estimate the electricity consumption in the tourist accommodation facilities. This could be easily done by checking the electricity bills and calculating the annual mean value of electricity consumed.

In case an accommodation already has photovoltaic system installed, normally measurements will be installed to identify if 20% are already achieved..

In a second step basic information about photovoltaic and wind power should be collected. Continuing, you should contact your technician to require a proposal on the installation of photovoltaic systems or wind power electricity generators in order to cover at least the 20% of annual mean value of the electricity consumed in the accommodation.





39. ENERGY: HEATING FROM RENEWABLE SOURCES

“At least 50% of the total energy used to heat either the rooms or the hot sanitary water shall come from renewable energy sources.”

1. In a first step it is necessary to check which heating system is installed (e.g. already biomass) and does it cover my heating needs by 50%? This could be proofed by calculating the heat input with invoices. In case own biomass is used only appreciations can be undertaken; In case oil heating is supported by solar collectors only appreciation of yearly output of solar heating on the basis of sun days and radiation is possible.
2. In a second step it is necessary to check if it is possible and economically to exchange heating carriers, e.g. substitute oil with biomass by exchanging boiler





40. ENERGY: BOILER EFFICIENCY

“The tourist accommodation shall have a four-star boiler as defined by Article 6 of Directive 92/42/EEC.”

Four-star boilers can be up to 95% efficient. This information is usually contained in the technical booklet of the boiler; otherwise, the manufacturer or the retailer shall certify the number of stars of the boiler. SEDBUK is a similar rating system used in the UK that highlights the boiler's efficiency together with a rating of A-E.

This criterion can be fulfilled even by boilers which are excluded by Directive 92/42/EEC but have equivalent efficiency to the four star of the Directive.

1. In a first step it is important to realize if the boilers is covered by this directive: hot-water boilers fired by liquid or gaseous fuels with a rated output of no less than 4 kW and no more than 400 kW
2. Identify if the boiler already installed is a 4* star- which can be done by contacting the manufacturer
3. Check if the boiler has efficiency as required in the directive
4. In case of the purchase of a new boiler make sure that the boiler is of high efficiency





41. ENERGY: BOILER NO_x EMISSIONS

“The boiler shall be class 5 of the EN 297 prA3 norm regulating NO_x emissions, and shall emit less than 70 mg NO_x/kWh.”

This evidence can only be given by a technician.





42. ENERGY: DISTRICT HEATING

“The heating of the tourist accommodation shall be provided by district heating.”

In this case it is only possible to check if the accommodation is already connected and, in case not, if it is possible to connect to a district heating;





43. ENERGY: COMBINED HEAT AND POWER

“All electricity and heat of the accommodation shall be provided by a heat and power plant.”

As tourist accommodation services will hardly operate their own Combined heat and power station, the only way to comply with this criterion is to check if heat and power come from an energy supplier, which operates such a plant.





44. ENERGY: HEAT PUMP

“The accommodation shall have a heat pump providing heat and/or air conditioning.”

Heat pumps are space-conditioning systems that provide both heating and cooling. Heat pumps use a refrigeration cycle, just like refrigerators and air conditioners, to pump heat from one space to another. The difference between a heat pump and other refrigeration systems is a “reversing valve” which switches the system between the heating and cooling modes. A heat pump can generate heat from air, water, soil.

1. To comply with this criterion the first step is to check if there is already a heat pump in place
2. In case no heat pump is installed a feasibility study should be undertaken, e.g. contacting an engineer and check if it is technical and economical possible to install a heat pump
3. In case a heat pump will be installed this action should be included in an action plan.





45. ENERGY: HEAT RECOVERY

“The tourist accommodation shall have a heat recovery system for 1 (1 point) or 2 (2 points) of the following categories: refrigeration systems, ventilators, washing machines, dishwashers, swimming pool(s), and sanitary waste water.”

Heat recovery systems generate waste heat from different energy consumers.

1. To comply with this criterion the first step is to check if there is already a heat pump in place.
2. In case no heat pump is installed, a feasibility study should be undertaken, e.g. contacting an engineer and check if it is technical and economical possible to install a heat pump
3. In case a heat pump will be installed this action should be included in an action plan





46. ENERGY: THERMOREGULATION

“The temperature in every room shall be individually regulated.”

This criterion requires all bedrooms to have control systems to regulate the temperature individually according to specific needs (e.g. thermostatic radiator valves). This measure is intended to save energy by reducing overheating where practical.

In case an accommodation has a heating system with individual radiators, thermostatic radiator valves can be easily installed by a technician.





47. ENERGY: INSULATION OF EXISTING BUILDINGS

“The building shall have insulation above the minimal national requirements, so as to ensure a significant reduction of energy consumption.”

Each country does have building standards where insulation requirements are described. The main problem is that these standards change over time and that, for an older building, it might be difficult to evaluate which standards were relevant when the building was constructed. If no information is available, only a technician can identify the current state of insulation and compare these figures with relevant standards.

A possibility of increase in insulation of the building can be derived from the following formula, which takes into consideration the possible economic profitability of the increase in insulation.

$$R = \left(\frac{D^* \times 24 \times L}{m \cdot \epsilon} \right) - R_o$$

R = thermal resistance of the building ($R = s / \epsilon$, where s = thickness of the insulating material and ϵ = thermal conductivity of the insulating material)

R = the optimal added thermal resistance to the building

D* = “days centigrade”, a parameter linked to the local climate which is given by the local authority . They are higher in colder climates.

L = cost of fuel and of maintenance of the heating system

m = cost of the insulating agent per m³

ϵ = thermal conductivity of the insulating material

R_o = initial thermal resistance





48. ENERGY: AIR CONDITIONING

“The air conditioning system shall have Class A energy efficiency as laid down in Commission Directive 2002/31/EC of 22 March 2002 implementing Council Directive 92/75/EEC with regard to labelling of household air-conditioners, or have corresponding energy efficiency. This criterion does not apply to appliances that can also use other energy sources, air-to-water and water –to-water appliances, or units with an output (cooling power) greater than 12 kW.”

The first step is to explore the energy-efficiency of the air-conditioning devices in place. After this it is possible to calculate whether the air-conditioning complies with the requirements of EU regulation. It is preferred to achieve better than required by legislation as this will lead to more reduction of energy consumption and thus leads to higher cost savings.

The best way to ensure that buildings are comfortable for guests is to ensure that they are energy efficiently designed in the first place. Such buildings require much less cooling energy with simpler equipment than those buildings, which are not energy efficient. Building design contracts should provide calculations for energy consumption and estimates of capital and running cost for a range of design options for improving energy efficiency of existing buildings.





49. ENERGY: AUTOMATIC SWITCHING-OFF AIR CONDITIONING

“There shall be an automatic system that turns off the air conditioning when windows are open.”

In case the rooms do not comply with this criterion, there are several technical possibilities:

- Install independent regulation systems in each room
- Install a central (computer) system to regulate the air conditioning in each room

This criterion requires a technical solution, which might be cost intensive. Often it will only be possible to match this criterion when re-building the accommodation and taking into account a technical solution for automatic switching.



50. ENERGY: BIOCLIMATIC ARCHITECTURE

“The tourist accommodation shall be built according to bioclimatic architectural principles”

NATURAL HEATING - Measures are taken to make best use of heating from natural climate

- appropriate exposure of the building to winter sun;
- appropriate shelter of accommodation from winter winds through natural or artificial devices;
- appropriate position and size of glazed surfaces and opening to use winter sun (passive heating);
- appropriate thermal mass, thickness and insulation capacity of the structure and envelope materials (brick, stone, wood...)
- appropriate building shape...

NATURAL LIGHT - Measures are taken to make best use of natural light

- glazed surfaces and openings are placed in such a way that natural light on a sunny day is available for at least 8 hours a day for at least six months of the year in common areas;
- glazed surfaces and openings are placed in such a way that natural light on a sunny day is available for at least 8 hours a day for at least six months of the year in at least 50% of the rooms;
- the accommodation does not create shades and interfere with the opportunity of adjacent buildings to use natural light (it's not really relevant for existing buildings);

NATURAL COOLING - Measures are taken to make best use of cooling from natural climate

- appropriate orientation of the accommodation to summer shade;
- appropriate exposure of the accommodation to summer breezes;
- appropriate shading of windows with natural or artificial shading devices;
- appropriate array of windows, rooms and corridors to enhance natural ventilation;
- appropriate devices in place to bring air from cool to warm sites (for example through mechanical
- ventilation systems which inputs cool air from basement in common rooms);



NOISE - Measures are taken to reduce the noise transmission

- common areas are enhanced with material which reduce noise indoor transmission to other parts
- the tourist accommodation is built with material which reduces noise to the outside;
- the tourist accommodation has green barriers as acoustic screens for the entire building.
- the orientation of the accommodation and of its openings and the envelope materials reduce the exposure to outdoor sources of noise (roads, railways, airport, leisure activities...)

BUILDING MATERIALS - Measures are taken to increase the use of local building materials

- at least one main part of the accommodation building is built with local materials;
- at least one main part of the accommodation building is built with recycled material;
- there are measures in place to minimise the amount of energy embodied in new construction materials;

LANDSCAPE INTEGRATION - Measures are taken to maximise the integration of the accommodation with the landscape

- according to the site, the accommodation is integrated into the landscape;
- the accommodation makes use of local vegetation (for example vegetation which does not need much watering).



51. ENERGY: ENERGY EFFICIENT REFRIGERATORS, DISHWASHERS, WASHING MACHINES AND OFFICE EQUIPMENT

Part A – Refrigerators (1 point)

“All household refrigerators shall be of Class A efficiency according to Commission Directive 94/2/EC of 21 January 1994 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations², and all frigo- or mini-bars shall be at least class C.”

Part B – Dishwashers (1 point)

“All household dishwashers shall be of class A energy efficiency as laid down in Commission Directive 97/17/EC of 16 April 1997 implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers³.”

Part C – Washing machines (1 point)

“All household washing machines shall be of class A energy efficiency as laid down in Commission Directive 95/12/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines⁴.”

Assessment and verification requirements (Parts A,B and C)

“The applicant shall provide documentation indicating the energy class of all the washing machines, dishwashers, refrigerators and frigo- and mini-bars, indicating those that have an eco-label.”

Part D – Office equipment (1 point)

“At least 80% of office equipment (PCs, monitors, faxes, printers, scanners, photocopying machines) shall qualify for the energy star as laid down in Regulation (EC) No 2422/2001 of the European Parliament and of the Council of 6 November 2001 on a Community energy efficiency labelling programme for office equipment⁵.”

In a first step it is necessary to identify all household equipment in place. It is recommended to list and document it. This information should include information about the energy label and the energy star label, brand, year of purchase, load, operating hours, maintenance intervals and organisation carrying out maintenance activities.

In a second step it is necessary to check that all household equipment has class A, mini and frigo bars Class C, and at least 80% of office equipment the energy star label.

In a third step the organisation must be sure that new equipment purchased does at least have the energy label / energy star label and, if possible, the EU Ecolabel for products. Products with a national ecolabel or the EU flower are not only energy efficient but also produced following strict environmental standards. This includes labels such as Nordic svanen.nu, Blauer-Engel.de, Umweltzeichen.at, NF Environnement in France...

Producers and suppliers providing EU Ecolabel products can be identified in the official web-site: www.eco-label.com



52. ENERGY: REFRIGERATOR POSITIONING

*“The refrigerator(s) shall be positioned and regulated according to energy saving principles.
This criterion applies to kitchen refrigerators.”*

The first step is to control the location of your refrigerator in the kitchen. The right position is as far away as possible from a heat source such as a stove, sunny windows, hot water heaters, warm air from heating ducts, radiators etc.

As a second step, you need to ensure the correct maintenance of your refrigerator. To allow air to circulate around the condenser coils, which allows for a more efficient operation, leave a space between the wall or cabinets and the refrigerator or freezer and keep the coils clean, vacuuming them at regular intervals (at least once a month).

A third important measure is to encourage staff to open the refrigerator doors as few times and as short as possible.





53. ENERGY: AUTOMATIC SWITCHING OFF LIGHTS IN GUEST ROOMS

“Automatic systems which turn the lights off when guests leave their rooms shall be installed in 80% of the guest rooms.”

This criterion is only achievable with technical measures. Systems are well-known and normally work with key cards. Guests have to insert their key card inside the room in a special slot to switch on and off all lights.





54. ENERGY: AUTOMATIC SWITCHING OFF OUTSIDE LIGHTS

“Unnecessary outside lights shall be turned off automatically.”

External lighting will be used by accommodation services to

- Illuminate buildings, gardens and other outside areas open to guests
- Secure minimum illumination for safety purposes.

It is clear that illumination for safety reasons can't be switched off and should operate during night times and bad weather conditions. However, for these lights energy saving lamps should be installed such as energy saving lamps with class A of the EU Energy label.

Illumination for buildings, gardens and other areas open to guests should be only switched on when needed. The following rules should be considered:

- Energy saving lamps should be installed when lights are switched on for a period longer than 5 hours per day.
- In case lights are operated by movement sensors, incandescent lamps should be installed or, if technically possible, energy efficient bulbs class A. Make sure life time is not influenced by extensive switching, e.g. manufacturers information.





55. WATER: USE OF RAINWATER AND RECYCLED WATER

Part A – Rainwater (1.5 points)

“Rainwater shall be collected and used for non-sanitary and non-drinking purposes.”

Part B – Recycled water (1.5 points)

“Recycled water shall be collected and used for non-sanitary and non-drinking purposes.”

In case rainwater collection systems are already in use it is necessary to make sure that the water is used for non-sanitary and non-drinking purposes.

From the point that no water measures have been taken, the following steps can be taken into account to comply with this criterion.

Step 1: Rainwater collection

Rainwater container for garden watering/car-wash use

A water container can be easily made or bought that is connected to the roof drainage system. The kind of equipment to use depends, in general, on local or national rules.

Important for choosing a grey-water system is comparing the necessary investment with the savings on drinking water consumption. If the drinking water consumption is high, one could consider recycling all used water for toilet flush, washing machine and garden use. In this case, the waste water need a purification in a waster water treatment system (closed system).





56. WATER: WATER FLOW FROM TAPS AND SHOWER HEADS

“The average flow from all taps and shower heads excluding bath taps shall not exceed 8.5 litres/minute.”

The first step is to measure the current water flow of taps and showers. It is recommended to take a flow meter for this experiment. Otherwise you can take a small bucket and a watch.

You have to make sure that the same measurement is applied for all taps and showers (excluding those for bathtubs).

In case the taps and showers do not comply there are several technical possibilities:

- Install (pressure independent) flow reducers
- Aerators
- Decrease water pressure in the net





57. WATER: WC FLUSHING

“At least 80% of WCs shall consume 6 litres per flush or less”

Check how much water is currently flushed in WCs. In case more than 6 litres are used for one flush there are several opportunities to reduce the water consumption

- Some water tanks with more than 6 litres allow to fix water consumption individually and reduce the volume to 6 litres or less
- In case water tanks cannot be fixed an opportunity is to insert water filled plastic bottles or bricks to reduce the volume.
- Two level toilet flush with maximum flush at 6 litres (“stop-button”).
- Instalment of manual flushes with automatic return.





58. WATER: DISHWASHER WATER CONSUMPTION

*“The water consumption of the dishwashers (expressed as $W(\text{measured})$) shall be lower or equal to the threshold as defined in the equation below using the same test method EN 50242 and programme cycle as chosen for Commission Directive 97/17/EC:
 $W(\text{measured}) \leq (0.625 \times S) + 9.25$, where:
 $W(\text{measured})$ = the measured water consumption of the dishwasher in litres per cycle, expressed to the first decimal,
 S = the applicable number of standard place settings of the dishwasher.”*

The water consumption is normally given in the technical booklet of the dishwasher. A second opportunity is to contact the manufacturer to get this information.

Identify the actual dishwasher water consumption of each dishwasher individually. If the W (measured) is above the threshold it might be worth to change the machines, especially when there are old ones. New machines will be more efficient in terms of water and energy consumption. It is therefore useful to calculate how much water can be saved by buying a new machine to define the payback time.





59. WATER: WASHING MACHINE WATER CONSUMPTION

“The washing machines used by the accommodation or by its laundry service provider shall use 12 litres of water or less per kg of wash load measured according to EN 60456:1999, using the same standard 60°C cotton cycle as chosen by Directive 95/12/EC.”

Identify the actual water consumption of each washing machine individually. This information is given by manufacturer or the technical booklet. The amount is calculated with the “reference program” (60°C cotton).

If the water consumption is much above 12 litres per kg of wash-load it might be worth to change the machines, especially when there are old ones. New machines will be more efficient in terms of water and energy consumption. It is therefore useful to calculate how much water can be saved by buying a new machine to define the payback time.





60. WATER: TAP WATER TEMPERATURE FLOW

“At least 80% of the taps shall allow a precise and prompt regulation of the water temperature and of the water flow.”

Identify the actual water consumption of each tap individually. It might be useful to change taps which are used daily with precise flow regulation devices. Calculate how many taps will be changed and the possible reduction of water consumption to see whether the payback time is useful.

One usual way to control the water flow is to use flow restrictors or valves.

For the temperature, there are sensitive washroom controls that prevent water wastage and ensure hot water taps to reach the desired temperature.





61. WATER: SHOWER TIMERS

“Showers in kitchens or outdoors shall have a system to stop the flow of water automatically after a certain time or if not in use.”

It might be useful to change showers which are used daily with time regulation devices.

It is recommended to calculate how many showers will be changed and the possible reduction of water consumption to see whether the payback time is useful. Identify the actual water consumption of each shower concerned.

Systems helping to stop the water flow might be mechanical stops, movement controls, step on systems and fee systems.





62. DANGEROUS CHEMICALS: DETERGENTS

“At least 80% by weight of hand dishwashing detergents and/or detergents for dishwashers and/or laundry detergent and/or all purpose cleaners used by the tourist accommodation shall have been awarded the Community eco-label or other national or regional EN ISO Type I eco-labels”

The first step is to indicate the total amount of the following detergent categories:

- Hand dishwashing detergents
- Detergents for dishwashers
- Laundry detergents
- All purpose cleaners

The second step is to indicate for each category the amount of Eco-labelled products

The third step is to provide evidence that the amount of Eco-labelled products is at least 80%

In case less than 80% of detergents without Ecolabel are used it is necessary to identify and purchase relevant products.

Different manufacturers and providers around EU countries can be found in the following WebPages:

- The EU Flower in the European Union
http://ec.europa.eu/environment/ecolabel/index_en.htm
<http://www.eco-label.com/>
- The Nordic Swan in Sweden, Denmark, Finland and Iceland;
<http://www.svanen.nu/eng/>
- The Blue Angel in Germany;
<http://www.blauer-engel.de/willkommen/willkommen.htm>
- The NF Environnement in France
<http://www.marque-nf.com/>
- In Austria
<http://www.umweltzeichen.at/>





63. DANGEROUS CHEMICALS: INDOOR PAINTS AND VARNISHES

“At least 50% of the indoor painting of the tourist accommodation shall be done with indoor paints and varnishes awarded with the Community eco-label or other national or regional EN ISO Type I eco-labels.”

The first step is to indicate if already Ecolabel paints and varnishes have been used. It is necessary to identify the quantity used in relation to the total quantity of paints and varnishes.

In case the start situation is a building painted with solvent paints, wait until the next large maintenance round.

Step 1: Choose between the less harmful paints or totally organic paints. For organic paints the old layers need to be stripped because they are porous.

Step 2: Removal of old paint. Wear good protection (fine dust mask of the highest quality). Bring the waste to a chemical disposal place.

Step 3: Paint a minimum of layers with plenty ventilation.

In case of new surfaces, consider not to paint, the main reason is aesthetics. Plain wood is also considered beautiful.





64. DANGEROUS CHEMICALS: DOSAGE OF SWIMMING POOL DISINFECTANT

“The swimming pool shall have an automatic dosage system that uses the minimum amount of disinfectant for the appropriate hygienic result.”

This criterion is easily reached by using of appropriate technical equipment.





65. DANGEROUS CHEMICALS: MECHANICAL CLEANING

“The tourist accommodation shall have precise procedures for conducting chemical-free cleaning, such as use of micro fibre products or other non-chemical cleaning materials or activities with similar effects.”

This criterion mainly focuses on staff training and corrects cleaning procedures.

Often detergents and chemical cleaners are used without real need and correct cleaning can be achieved with mechanical cleaning.

Steam evaporators are a good alternative to chemical cleaners as the results are even better, pay back times are short (substitute chemicals by the evaporator) and health and safety procedures for the usage of chemicals can be eliminated with more time saving ones.





66. DANGEROUS CHEMICALS: ORGANIC GARDENS

“Green areas shall be managed either without any use of pesticides or according to organic farming principles, as laid down in Council Regulation (EEC) No 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs¹⁴ and its subsequent amendments, or as laid down in national law or recognised national organic schemes.”

Not all tourist facilities in Europe have organic garden around the house or hotel, hence, basic guidance is needed to convert existing gardens to organic ones. It is relatively easy to cease using chemical fertilizers and pesticides and replace these substances with organic compost and green-labelled plant protection substances. Preferably all tourist accommodations applying for eco-label should convert their gardens to organic.

In order to implement the ecolabel criteria, owners of tourist facilities should:

- Prepare an organic garden, using natural structures (wood, clay, stone) and cultivate the soil in organic way.
- Ensure exclusion of any chemical fertilizers and pesticides.
- Select indigenous plants and flowers
- Use biological plant protection kits (including well-known “friendly” insects).
- Use collected rainwater for irrigation.





67. WASTE MANAGEMENT: COMPOSTING

“The tourist accommodation shall separate relevant organic waste (garden waste 1 point; kitchen waste 1 point) and shall ensure that it is composted according to local authority guidelines (e.g. by the local administration, in-house or by a private agency).”

1. Make sure that adequate kitchen waste and garden wastes are collected.
2. Decide whether composting should happen on site (already existing) or if a local collecting system or composting site can be used

Train staff to separate waste in accordance with composting rules
Make sure that the accommodation makes use of the compost.

If a common composting site is not too distant, the owners of accommodations may use it, instead of making a separate site in their garden.

In order to put this criterion into practice, the owners or employees of tourist facilities prepare themselves to use composting.





68. WASTE MANAGEMENT: DISPOSABLE DRINK CANS

“Except where required by law, disposable drink cans shall not be offered in the areas under the ownership or the direct management of the accommodation.”

First of all, collect information regarding the offer on your premises of beverages in drink cans. If there is no such offer, you already comply with the criterion, you can fill in the declaration to such extent.

If you do sell/give away drink cans, you need to verify:

- if there is an alternative to these cans, such as drinks served directly from the draw or bottled drinks
- if these alternatives are compatible with local hygiene and safety regulations. This can be verified with your health officer or public security authority. An example for this is the pool area where guests move around without shoes





69. WASTE MANAGEMENT: BREAKFAST PACKAGING

“Except where required by law, single dose packages shall not be used for breakfast.”

1. Find out the number/type of single packaged products you buy and offer. This can be easily found through your suppliers' invoices or your Order forms, for example
 - Honey, jam, jelly, marmalade and other bread spreads
 - Butter and other dairy products (yoghurt, cream)
 - Sugar and artificial sweetener
2. Enquire if there is legislation requiring the accommodation to serve those products packaged, and analyze the legislation regarding its requirements.
3. Identify alternative ways of serving and offering food in a way that it meets guests' health and comfort requirements.
 - protective Plexiglas shield over open food
 - dispensers
 - staff serving certain products on demand





70. WASTE MANAGEMENT: FAT/OIL DISPOSAL

“Fat separators shall be installed and pan fat/oils and deep-frying fat/oils shall be collected and disposed of appropriately.”

1. Analyse the areas in your operation where cooking /frying fats are used and produced, and the areas where greasy objects (dishes, pans, utensils) will be washed/cleaned and therefore the water will have to be separated from the fatty substances.

According to the quantities and type of fat, decide on a system to collect, store and dispose of it.

2. Try to collect fats and oils separately before it will be mixed with other substances or water.
3. The most frequent appliance is a grease trap, arrestor or separator.
Information to this regard can usually be obtained from the local waste authorities (disposal), and from kitchen equipment producers (regarding the fat separators).
4. Organize (or request of the responsible authority) regular transport of the collected fat to the final disposal point. Document this transport and obtain a declaration regarding the destination of the fat.
5. Make sure regular cleaning of the devices and include this in a maintenance programme.





71. WASTE MANAGEMENT: USED TEXTILES AND FURNITURE

“Used furniture, textiles and other material shall be sold or given to charity or to other associations which collect and redistribute such goods.”

The first thing to do is the identification of used textiles, furniture and other material that could be reused by a third party. Such items could be: outmoded furniture or equipment, bed mattresses, TVs, refrigerators, old crockery, cutlery, linen, worn towels, tablecloths, uniforms that cannot be repaired or reused etc.

Collect them and store them in a place where they will be preserved in good condition (by humidity etc.).

Make an inquiry on the possibilities you have to give these items to charity.

In practice it may be hard to receive proof from charity organisations. Make sure something is given to you.





72. OTHER SERVICES: ENVIRONMENTAL COMMUNICATION AND EDUCATION

“The tourist accommodation shall provide environmental communication and education notices on local biodiversity, landscape and nature conservation measures to guests.”

1. Identify relevant and particular environmental habitats, species in the area of the accommodation.
2. Identify environmental relevant topics important for the accommodation owner
3. Contact local and national environmental associations, museums, schools, tourist authorities and ask for already available information on environmental relevant topics.
4. Present this information in a way convenient for the accommodation service. Examples for this are
 - a. Blackboards with posters
 - b. Booklets and brochures
 - c. Oral information at predefined times
 - d. Dia-shows





73. OTHER SERVICES: No SMOKING IN ROOMS

“Smoking shall not be allowed in at least 50% of rooms.”

- Make sure that at least 50% of all rooms are dedicated to smoking free areas
- Display this information clearly in the rooms
- Ask already at booking stage about preferences of clients





74. OTHER SERVICES: BICYCLES

“Bicycles shall be made available to guests”

1. Tourism companies must rent out bicycles, and the bikes and their brands must be in line with the specifics of the surrounding terrain. The number of bicycles must be in line with the number of guests that the accommodation can handle.
2. If the tourism company does not offer bicycles for rent, other services provided by local businesses must be on offer.
3. If the tourism company does offer leasing of bicycles, minimal infrastructure elements and related elements must be ensured:
 - Places to park the bike
 - Opportunities to transport bicycles
 - Minimal opportunities to service bicycles;





75. OTHER SERVICES: REFILLABLE BOTTLES

“The tourist accommodation shall offer at least one of the following beverages in refillable bottles: soft drinks, water and beer.”

First of all, collect information regarding the offer on your premises of beverages and in which containers they are sold/served.

If you are already selling/serving at least one of the following in refillable bottles, you are complying with the criterion and have only to document this with your supplier’s invoices and fact sheets:

- Water
- Soft drinks
- Beer

If you are not already selling refillable bottles on your premises, you need to contact your suppliers and ask them if they offer beverages in refillable bottles. If no such supply is offered, try to search out other firms.

Document every step of these transactions and most important, request exhaustive fact sheets from the supplier regarding the product and its bottling.





76. OTHER SERVICES: PAPER PRODUCTS

“At least 50% of toilet/tissue paper and/or office paper used shall have been awarded the Community eco-label or other national or regional EN ISO Type I eco-labels (1 point for each of these two categories of paper products)”

1. The accommodations must use paper products with eco-certification for their guests (the kitchen, the dining room, the lavatory);
2. The owners and employees of the facilities must use eco-certified paper products for office needs.
3. At least one-half of the paper that is used by guests, owners and employees must be eco-certified.

There are several certificates for paper products, including:

- The EU Flower in the European Union
http://ec.europa.eu/environment/ecolabel/index_en.htm
<http://www.eco-label.com/>
- The Nordic Swan in Sweden, Denmark, Finland and Iceland;
<http://www.svanen.nu/eng/>
- The Blue Angel in Germany;
<http://www.blauer-engel.de/willkommen/willkommen.htm>
- The NF Environnement in France
<http://www.marque-nf.com/>



77. OTHER SERVICES: DURABLE GOODS

“At least 10% of any category of durable goods (such as bed-linen, towels, table linen, PCs, portables, TVs, mattresses, furniture, washing machines, dishwashers, refrigerators, vacuum cleaners, hard-floor coverings, light bulbs) present in the tourist accommodation shall have been awarded the Community eco-label or other national or regional EN ISO Type I eco-labels (1 points for each of up to three categories of durable goods).”

In a first step it is necessary to identify if one of the following goods is already certified with an ecolabel. The following product groups can have an EU Ecolabel:

- a. bed linen,
- b. towels,
- c. table linen,
- d. personal computers,
- e. portable computers,
- f. televisions,
- g. mattresses,
- h. furniture,
- i. washing machines,
- j. dishwashers,
- k. refrigerators,
- l. vacuum cleaners,
- m. hard-floor coverings,
- n. light bulbs

It is then necessary to check also if products from a national ecolabel are in use. Information about this can normally be found on product descriptions, manuals.

In a second step it is necessary to identify the total number of goods of those categories in which Eco-labelled products are already in use. If 10% are achieved then the criterion is fulfilled

You then proceed to indicate for each relevant category the number of EU or EN ISO Type I eco-labelled products present on the premises.



EU Eco-label
(Europe)



Blue Angel
(Germany)



Nordic Swan
(Scandinavia)



DGQA
(Catalonia Spain)



NF
Environnement
(France)



Stichting
Milieukeur
(Netherland)



AENOR MA
(Spain)



Umweltzeichen
(Austria)



78. OTHER SERVICES: ORGANIC FOOD

“The main ingredients of at least two dishes shall have been produced by organic farming methods, as laid down in Regulation 2092/91.”

Clients of tourist accommodations must be informed of the usefulness of consuming organic food. It is highly recommended to use pictograms for guiding guests through organic food availability:

- Grain
- Fruits
- Vegetable
- Wine
- Honey
- Vegetable oil
- Spices
- Meat

The owners or employees of each tourism accommodation must provide all manner of information about ways of saving organic agriculture – something that is a cornerstone of environmentally friendly food production:

In addition to all of this:

- The owners and employees of tourist accommodations have information which they can provide to tourists about organic food;
- Certificates and signs of organic food quality must be posted visibly at tourist facilities if the facilities have them;
- Employees must make sure that tourists have access to organic food





79. OTHER SERVICES: LOCAL FOOD PRODUCTS

“At least two locally sourced food products shall be offered at each meal, including breakfast.”

Locally sourced product is one that has been caught or grown within 100 km of the accommodation, or, if the geographical conditions of the country require greater distances, it is a product which distinctly reflects traditional methods using the most locally available sources.

- Consider to substitute unhealthy industrial food diet with healthier organic and traditionally prepared local food.
- Consider to allocate time to screen local and regional food availability. A supply chain should be built and maintained in order to ensure continuous local food supply. Farmers and their cooperatives to be identified and food catalogue should be prepared in the region.
- Adding extra efforts to inform and train chefs and catering managers about usefulness of local and traditional food. Occasional suppliers events should be organized and farmers called upon to ensure sustainable local food supply.





80. GENERAL MANAGEMENT: EMAS REGISTRATION OR EN ISO CERTIFICATION OF THE TOURIST ACCOMMODATION

“The tourist accommodation shall be registered under the Community eco-management and audit scheme (EMAS) or certified according to EN ISO 14001.”

This module covers the implementation of an audited eco-management system by the tourist accommodation, either the European Eco-Management and Audit Scheme (EMAS) and/or the international certified management system according to EN ISO (International Standards Organization) 14001.

The basic idea behind this criterion is to find out and/or promote the continuous evaluation and improvement of the ecological efficiency of a tourist accommodation by an audited management system, in short promote sustainable development





81. EMAS OR EN ISO CERTIFICATION OF SUPPLIERS

“At least one of the main suppliers or service providers of the tourist accommodation shall be registered with EMAS or certified according to EN ISO 14001.”

Main supplier is one of the 10 main suppliers of the accommodation in terms of quantity of products provided or entity of the service.

For example: provider of soap, detergents, paper, food, may be among the main providers of goods. Agencies responsible for out-sourced laundry service, maintenance of HVAC or maintenance of office equipment may be among the main service providers.

In case you do not have a main supplier with environmental management, you have to check if there are registered suppliers in the sector you need and if possible to change your main supplier.

The following link gives you a list of EMAS registered organizations:
http://europa.eu.int/comm/environment/emas/registration/sites_en.htm

Unfortunately, there is no official register of ISO 14001 certified organizations. You can get information from your chamber of commerce and industry.





82. GENERAL MANAGEMENT: ENVIRONMENTAL QUESTIONNAIRE

“The accommodation shall provide its guests with a questionnaire covering their views about the environmental aspects of the accommodation.”

You have to create a questionnaire that tackles issues such as:

- Room temperature (intent to avoid overheating and over cooling);
- Sensitivity to other energy saving measures;
- Sensitivity to water consumption (asking for main elements of comfort in order to identify where it is possible to save water without reducing comfort);
- Acceptance of alternative transportation;
- Expectations of guests referring to tourist accommodations certified with an ecolabel
- Suggestions for general improvement
- Satisfaction with special services of the tourist accommodation





83. GENERAL MANAGEMENT: ENERGY AND WATER METERS

“The accommodation shall have installed additional energy and water meters so as to allow data collection on consumption of different activities or machines.”

The regular recording of meter readings will be required as well as a reasonable number of meters for the size and scope of the business.

While small businesses will not find it useful to meter individual areas and departments this can be very helpful for bigger units. Bigger accommodations will have areas such as:

- Kitchen
- Outdoor areas
- Recreation areas, sanitary area and sauna
- Rooms per floor
- Apartments





84. GENERAL MANAGEMENT: ADDITIONAL ENVIRONMENTAL ACTION

Part A – Additional environmental actions (up to 1.5 points each to a maximum of 3 points)

“The management of the tourist accommodation shall take additional actions to improve the environmental performance of the tourist accommodation and which are not covered by any of the above criteria (either mandatory or optional). The Competent Body assessing the application shall attribute a score to these actions not exceeding 1.5 points per action.”

Part B – Eco-label award (3 points)

“The tourist accommodation shall be awarded one of the national or regional EN ISO Type I eco-labels.”

The owners or employees of tourist accommodations will satisfy this criterion by preparing or purchasing information that is available to tourists in the form of booklets or books about:

- Natural resources (water, land/soil, forests);
- Nature trails and eco-tourism routes;
- Places where domestic animals can be observed;
- Biological and agro-biodiversity;
- Practical steps that can be taken to preserve biological diversity;
- Eco-certification and its importance.
- National ecolabels

Tourist accommodations should also offer:

- Information about the indigenous plant, tree and aquatic varieties and indigenous animal breeds of their immediate region
- Guidance on how important it is to protect biodiversity and agro-biodiversity,
- Information about eco-tourism guides in the area marked with farms and spots of interesting and protected plant and animal genetic resources;
- Agro-biodiversity maps of the region for tourists;
- Guide books and binoculars for animal or landscape watching;
- Information which allows tourists to identify fauna (birds, insects, fish) and flora and understand the value of genetic resources;
- Periodicals about the preservation of genetic resources and about responsible agriculture practice and environmental protection.

