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Revision of European Ecolabel Criteria for Tourist Accommodation and Campsite services

Preliminary report

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Executive summary

The objective of this project is to revise the two existing EU Ecolabel criteria relating to tourism services: tourist accommodation services (TAS) and camp site services (CSS). These criteria will be merged, to form one set of criteria for tourist accommodation. Since the last revision of the criteria (2009/5619/EC & 2009/5618/EC: Commission Decisions of 9 July 2009), a number of important changes have taken place in this area, including policy changes, changes in the market and changes in the perception of tourism's environmental impacts. This report outlines the factors which may lead to a change in criteria, through updates, revisions or the addition of new criteria.

The report consists of the following sections:

1. *Overview of report (Section 1)* – outlining the revision process and background to this revision.
2. *Scope and definition (Section 2)* – justification behind the merging of TAS and CSS, including a review of alternative environmental schemes for tourist accommodation, stakeholder feedback and regulatory updates since the previous EU Ecolabel revision.
3. *Market analysis (Section 3)* – a review of the tourist accommodation market including: segmentation, market trends, overview of relevant European policy initiatives, and overview of sustainable hotel services. A summary of key market aspects relevant for the criteria revision is also presented.
4. *Technical analysis (Section 4)* – an analysis of existing evidence to identify the main environmental impacts of tourist accommodation. This section looks at a variety of sources to ensure that the EU Ecolabel criteria focus on the most significant environmental impacts of tourist accommodation.
5. *Improvement potential (Section 5)* – a review of each existing criteria for tourist accommodation, proposals for updates to each and possible future updates during the revision process are outlined. Updates have been based on an overview of best environmental management practice in the tourism sector, feedback from stakeholders (most notably, a demand for the inclusion of social and quality criteria), regulatory updates and other factors including the development of the EU Ecolabel for new product groups.

1 Overview of report

This preliminary report is intended to provide the background information for the revision of the EU Ecolabel criteria for tourist accommodation (TAS) and campsite services (CSS). The study has been carried out by the Joint Research Centre's Institute for Prospective Technological Studies (JRC-IPTS) with technical support from Oakdene Hollins. The work is being developed for the European Commission's Directorate General for the Environment.

The EU Ecolabel criteria form key voluntary policy instruments within the European Commission's Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan and the Roadmap for a Resource-Efficient Europe. The Roadmap seeks to move the economy of Europe onto a more resource efficient path by 2020 in order to become more competitive and to create growth and employment. The EU Ecolabel promotes the production and consumption of products with a reduced environmental impact along the life cycle and is awarded only to the best (environmental) performing products in the market.

An important part of the process for developing or revising Ecolabel criteria is the involvement of stakeholders through publication of and consultation on draft technical reports and criteria proposals and through stakeholder involvement in working group meetings. This document provides the background information required for the working groups meeting, scheduled to take place in October 2014.

This preliminary report addresses the requirements of the Ecolabel Regulations No 66/2010 for technical evidence to inform criteria revision. It consists of: an analysis of the scope, definitions and description of the legal framework (Task 1); a market analysis (Task 2); and an overview of existing technical lifecycle assessment studies, revealing the significant environmental impacts of tourist accommodation (Task 3). Combined with input from stakeholders, this information will be used to determine the improvement potential and focus for the revision process (Task 4) and present an initial set of criteria proposals (Task 5, Technical Report).

1.1 Purpose of this document

This document forms part of the stages of revising the criteria for EU Ecolabel, for the product groups *'tourist accommodation services'* (TAS) and *'campsite services'* (CSS). The information contained in this document provides an overview of changes to the tourism market since the last revision of the criteria in 2009, and presents the technical information which informs the revision of the EU Ecolabel criteria for TAS and CSS, and supports the merging of the two sets of criteria into one set for *'tourist accommodation'*.

The EU Ecolabel criteria form key voluntary policy instruments within the European Commission's Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan (2008) and the Roadmap for a Resource-Efficient Europe (2020). The EU Ecolabel forms an important component of the European Commission's broader strategy to support green growth and eco-innovation.
On 16 July 2008 the European Commission presented the Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan. The plan includes a series of proposals on sustainable consumption and production aiming at:

- improving the environmental performance of products
- increasing the demand for more sustainable goods and technologies
- stimulating innovation in EU industry.

1.2 Background

The EU Ecolabel is a policy instrument designed to encourage the production and use of more environmentally friendly products and services. It achieves this through the certification and specification of products or services which have a reduced environmental footprint.

The main objective of this project is to revise the two existing EU Ecolabel criteria relating to tourism services: *tourist accommodation services* and *campsite services.* Since the last revision of the criteria (2009/578/EC & 2009/564/EC: Commission Decisions of 9 July 2009), a number of important changes have taken place in this area, including policy changes, changes in the market and changes in the perception of tourisms environmental impacts. This study sets out to re-align the criteria for tourism accommodation services and campsite services with these shifts to ensure that the EU Ecolabel policy instrument is able to fulfil the role assigned to it in the European Commission's Sustainable Consumption and Production Plan of 2008 [European Commission (2008)].

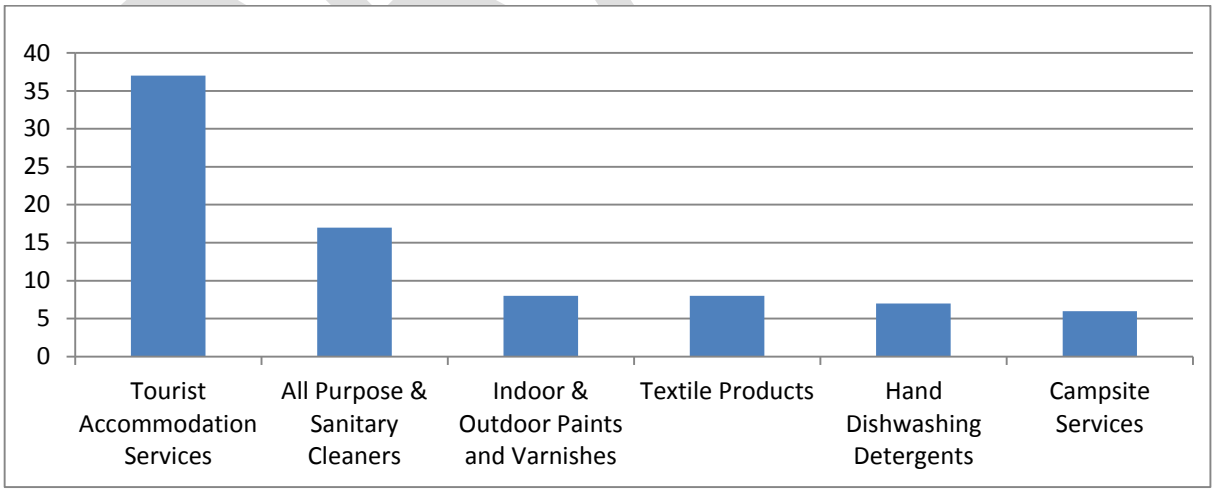
1.3 EU Ecolabel tourist accommodation services and campsite services

The current EU Ecolabel criteria for TAS [2009/578/EC] and CSS [2009/564/EC] were adopted in July 2009. Currently almost 600 licensees have been awarded the EU Ecolabel for this, although absolute numbers cannot be determined.

As of the end of 2010, the EU Ecolabel had been awarded to 83 companies manufacturing 1,157 distinct products.

Figure 1 indicates the success of both TAS and CSS criteria compared to other product groups within the EU Ecolabel scheme.

Figure 1: Top 6 EU Ecolabelled products, 2010 (% of organisations)



Source: EU Ecolabel Website – Facts and Figures

Figure 2 (below) shows the estimated number of licence holders with the EU Ecolabel for TAS or CSS. France and Italy have the largest number of licence holders (77% of the total).

Figure 2: Number of licence holders for TAS and CSS by country, 2013 (figures are estimates only)

Country	No. licence holders	Country	No. licence holders
Austria	24	Italy	153

Belgium	1	Malta	1
Cyprus	2	Montenegro	3
Czech Republic	6	Netherlands	4
Denmark	4	Portugal	3
Finland	2	Slovakia	2
France	326	Slovenia	1
Germany	3	Spain	22
Greece	2	Sweden	3
Hungary	1	Switzerland	43
Ireland	5	UK	9

Key		*Over 100 licence holders*		*11–100 licence holders*	*10 or fewer licence holders*

Source: E-cat registration figures plus additional contacts from personal correspondence

The criteria for TAS and CSS have been successful, with over 600 licence holders. A number of key issues will need to be considered throughout the revision of the TAS and CSS criteria, including:

- There are a number of alternative environmental criteria for other tourist related certification schemes, many of which are similar to that of the EU Ecolabel. A significant part of this update should consider the similarities and differences between these alternative labels to determine the current best practice for tourist accommodation.
- Where changes to criteria are made, the burden on existing licence holders – many of whom are micro enterprises – can be significant. Cost and administrative burdens (both for tourist applicants and Competent Bodies) can be substantial, without leading to increased sustainability of the product group. Throughout the update process it will be important to clarify any of the criteria which are currently ambiguous or unclear; as well as updating and revising criteria due to regulatory, market and environmental factors.

2 Scope and definition (Task 1)

Section summary:

This section forms the initial stage of revising the criteria for the product groups TAS and CSS.

Currently, there are separate sets of EU Ecolabel criteria for **Tourist Accommodation services** and for **Campsite services (TAS/CSS)** (2009/578/EC & 2009/564/EC: Commission Decisions of 9 July 2009). These criteria are currently being reviewed and updated. It is proposed that common criteria for both TAS and CSS be developed, to be titled "tourist accommodation".

An assessment of definitions used in other European voluntary labelling schemes and relevant regulations for tourism was undertaken. Overall, there are very few formal definitions of tourist accommodation or related services. Where distinctions are made between types of tourist accommodation, and different criteria are developed, these focus on either the size of the hotel or the services offered. Currently, the EU Ecolabel defines product groups using similar characteristics to avoid the confusion about the terms 'hotels' 'youth hostels' etc., which are often very poorly defined.

Although the criteria for TAS and CSS will be merged into one set of criteria, it is important to recognise that 'tourist accommodation' and 'camp sites' are two very distinct product groups - as shown by these being separately defined in other labels and schemes and offering distinctly different services. It is therefore proposed that the EU Ecolabel criteria for "tourist accommodation" should define these separately.

A review of alternative labels and schemes for tourist accommodation has also shown that the existing EU Ecolabel definitions for TAS and CSS are sufficient and include all relevant types of accommodation in scope. However, stakeholder feedback suggests that the definition should include conference facilities - where this is an ancillary service to the provision of the main service, accommodation.

The revised criteria for "tourist accommodation" will therefore define TAS and CSS as in the current EU Ecolabel criteria document, with the addition of conference facilities.

2.1 Introduction and aims

The aim of this section of the report (Task 1, scope and definition) is to provide an overview of existing statistical and technical categories, relevant legislation and standards, and to propose on that basis the scope and definition of the product for the revised criteria. In a second step, feedback will be gathered from stakeholders regarding the practicability of the proposed product group definition and scope as well as the revised criteria. Based on this stakeholder feedback, the product group definition and scope (including the merging of TAS and CSS criteria) might be confirmed, or otherwise a revised scope and definition of the product group will be proposed.

The focus of this section of the report is to explore (1) the scope of the current and revised criteria for TAS and CSS (including the possible merging of criteria, changes required due to regulatory updates etc.), and (2) the definitions of the product group (including a comparison of the current EU Ecolabel definition against other labels and data set where 'tourist accommodation' and 'camp sites' have a written definition).

2.2 Merging TAS and CSS criteria

The table below maps the existing, separate TAS and CSS criteria to highlight similarities and differences between them; and therefore, the degree to which these criteria sets can be merged.

Table 1: Mapping criteria for Tourist Accommodation and Camp Site Services

EU Ecolabel Criteria for TAS and CSS		Common criteria	Additional criteria
Mandatory criteria	Energy	✓	-
	Water	✓	-
	Detergents and Disinfectants	✓	-
	Waste		CSS includes additional criterion for: 16. Chemical toilet disposal points
	Other Services	✓	-
	General Management	✓	-
Optional criteria	Energy	✓	-
	Water	✓	-
	Detergents and Disinfectants		CSS includes additional criterion for: 66. Car washing in specially outfitted areas
	Waste		CSS includes additional criteria for: 75. Run-off from car parks 77. Regulation of Camp Site traffic
	Other Services		CSS includes additional criteria for: 78. Camp Site generated traffic 79. Trolleys for guests on the Camp Site 80. Unsealed surfaces
	General Management	✓	-

This table shows that there are clear synergies between the current sets of EU Ecolabel criteria for TAS and CSS, and so the product group "tourist accommodation" can be developed to cover both accommodation types. Where there are differences, these are primarily because of the difference in services provided by tourist accommodation and camp sites (e.g. chemical toilet disposal). These differences will need to be considered in the process of revising the

criteria, but do not prevent the two criteria sets from being merged. Instead, separate criteria can be developed to reflect these technical differences. This will, however, require separate definitions to be developed for TAS and CSS.

2.2.1 Stakeholder feedback of scope and definition

Initial stakeholder engagement consisted of sending a questionnaire to a wide variety of organisations and government bodies engaged in the tourist accommodation industry (see Annex X for questionnaire).

Overall, 98 responses were received as part of the stakeholder questionnaire; 72 hotel or camp sites (mainly consisting of 40 from France and 20 from Italy), 10 Competent Bodies, 2 government organisations, 8 travel/tourist associations, 1 tour operator and 5 other organisations. Responses were received from Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Spain and UK. Following is a summary of feedback from stakeholders:

1. Overall, there was support for merging TAS and CSS into a common set of criteria, titled "tourist accommodation services". However, separate definitions for tourist accommodation and camp sites should be maintained to account for any technical differences between the two which would result in dissimilar criteria.
2. The definition of facilities included as part of tourist accommodation needs to be expanded to include conference facilities. This will not require the addition of new criteria as many of the existing criteria are applicable (e.g. the use of Ecolabelled paper, the use of heating and lighting, information to guests) and will just need updating to clarify the inclusion of these facilities.
3. Overall, the questionnaire suggests that few new criteria need to be developed and many of the required changes can be incorporated in updates of existing criteria. Comments included, for example: updating criteria to take into account technology changes, new legislation or best practice; changing the allocation of optional points or updating optional criteria to mandatory.
   The inclusion of social and quality criteria is suggested by many of the respondents, although there is no clear majority either supporting or opposing this view. Where there was support of social criteria, this included ensuring proper employment practices, promoting local goods and services, educating guests and ensuring accessibility.

2.3 Existing definitions for TAS and CSS

2.3.1 EU Ecolabel definitions

Commission Decisions 2009/564/EC and 2009/578/EC define 'tourist accommodation services' and 'camp site services' as the following:

Tourist accommodation service: *The product group 'tourist accommodation service' shall comprise the provision, for a fee, of sheltered overnight accommodation in appropriately equipped rooms, including at least a bed, offered as a main service to tourists, travellers and lodgers.*

The provision of overnight sheltered accommodation may include the provision of food services, fitness and leisure activities and/or green areas.

In the framework of this Decision, food services include breakfast; fitness and leisure activities/facilities include saunas, swimming pools and all other such facilities, which are within the accommodation grounds and green areas include parks and gardens, which are open to guests.

Campsite service: *The product group 'campsite service' shall comprise, as a main service provided for a fee, the provision of pitches equipped for mobile lodging structures within a defined area. Mobile lodging structures as referred are those such as tents, caravans, mobile homes and camper vans. Accommodation facilities suitable for the provision of shelter to lodgers are facilities such as bungalows, rental mobile lodging and apartments.*

It shall also comprise other accommodation facilities suitable for the provision of shelter to lodgers and collective areas for communal service if they are provided within the defined area. Collective areas for communal services are such as washing and cooking facilities, supermarkets and information facilities.

The "campsite service" provided within the defined area may also include the provision, under the management or ownership of the campsite, of food services and leisure activities.

In the framework of this Decision, food services include breakfast; fitness and leisure activities/facilities include saunas, swimming pools and all other such facilities, which are within the accommodation grounds and green areas include parks and gardens, which are open to guests, and which are not part of the campsite structure.

2.3.2 Definitions from other voluntary labelling schemes

Table 2 below provides an overview of other voluntary labelling schemes available in Europe for tourist accommodation services.

Table 2: Alternative voluntary labelling schemes

Labelling programs	Product category	Definitions & scope
The Nordic Swan	Hotels and youth hostels	Hotel: A hotel offers guests rooms with beds including bed-linen, towels, shower/bath facilities, cleaning and breakfast. Youth hostel: A youth hostel offers guests beds and access to toilets and shower/bath facilities included in the basic price. Some requirements are specifically adapted to youth hostels, for example the kitchen area and the common rooms must satisfy special environmental requirements.
Malta Eco certification	Hotels	No definition given
Green Key	Hotels	No definition given
	Campsites	No definition given
	Small accommodation	We consider small accommodation an establishment with 15 bedrooms maximum (e.g. guest houses, ecolodge, bed and breakfast).
Travelife sustainability criteria	Tourist accommodation	No definition given
Green Tourism Business Scheme criteria	Tourism businesses	No definition given
Global Sustainable Tourism Criteria	Hotels and tour operators	No definition given

The following conclusions can be drawn from this:

- Although there are a number of alternative labels for tourist accommodation, few of them provide a definition or scope outline of the type of organisation or service they are referring to.

- Where distinctions are made between types of tourist accommodation, and different criteria are developed, these focus on either the size of the hotel (Green Key provides separate criteria for small accommodation), or the services offered (Nordic Swan distinguished hotels from youth hostels as these offer different service levels). The distinction between campsite and hotel is also made by Green Key criteria. Generally, definitions provided are broad.

In order to avoid the confusion about the terms 'hotels' 'youth hostels' etc. which are often very poorly defined, the EU Ecolabel similarly defines TAS and CSS by their characteristics (e.g. by the services offered or by the building type). It does not, however, distinguish by accommodation size as the label must be applicable to both small and larger organisations.
It is important to note that no relevant mandatory standards or regulations could be identified for tourist accommodation.

2.3.3 Other definitions for TAS and CSS

2.3.3.1 NACE definitions

Although there is no legal definition of 'tourist accommodation', there are formal classifications of economic activities in the European Community, defined by NACE codes. These statistical classification codes are the subject of legislation at the European Union level, which imposes the use of the classification uniformly within all the Member States [NACE (2008)].

The following NACE definitions are of relevance to tourist accommodation:

- **Hotels and similar accommodation (55.10)**

  This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stays by visitors. This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making. A range of additional services may be provided such as food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities as well as conference and convention facilities.

  This class *includes* accommodation provided by:
  - hotels;
  - resort hotels;
  - suite/apartment hotels; and
  - motels.

  This class *excludes*:
  - provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis.

- **Holiday and other short-stay accommodation (55.20)**

  This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stays by visitors, in self-contained space consisting of complete furnished rooms or areas for living/dining and *sleeping, with cooking facilities or fully equipped kitchens. This may take the form of apartments or flats in small free-standing multi-storey buildings or clusters of buildings, or single storey bungalows, chalets, cottages and cabins. Very minimal complimentary services, if any, are provided.*

  This class *includes* accommodation provided by:
  - children and other holiday homes
  - visitor flats and bungalows

- cottages and cabins without housekeeping services and
- youth hostels and mountain refuges.

This class *excludes:*

- provision of furnished short-stay accommodation with daily cleaning, bed-making, food and beverage services and
- provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis.

- **Camping grounds, recreational vehicle parks and trailer parks (55.30)**

This class *includes*:

- provision of accommodation in campgrounds, trailer parks, recreational camps and fishing and hunting camps for short stay visitors and
- provision of space and facilities for recreational vehicles.

This class also *includes* accommodation provided by:

- protective shelters or plain bivouac facilities for placing tents and/or sleeping bags.

This class *excludes*:

- mountain refuge, cabins and hostels.

2.3.3.2 Best Environmental Management Practice

A report has recently been published by IPTS on best environmental management practice (BEMP) in the tourism sector [JRC IPTS (2013)]. This report is intended to be used by all stakeholders in the tourism sector as a source of reliable information to help reduce environmental impacts and encourage continuous improvement.

This report does not provide one sole definition for 'tourist accommodation', but does distinguish between 'hotels' and 'campsites'. The following definition is provided for the latter, although no further definitions are given:

> ***Campsites*** *- to range from basic camping grounds comprising simply of pitches where guests can pitch their tents, to luxury campsites offering private bathrooms and a wide range of amenities and services including restaurants and swimming pools. Many campsites include pitches for both tents and caravans or motorhomes.*

2.4 Previous revision of TAS and CSS criteria

It is important to review the methodology behind the current TAS and CSS definitions when considering the scope and definition of the merged criteria for "tourist accommodation". The ANPA (2001) report of the project entitled "*Development of a Draft Commission Decision establishing the ecological criteria for the award of the Community Eco-label to tourist accommodation*" provides the initial justification for the use of the current TAS definition.

One key conclusion from this report is that the main purpose of TAS is the provision, for a fee, of overnight lodging (this translates into the provision of a pitch or equivalent for camping). The report states that:

"*The central service of all tourist accommodation is "providing lodging", and at the essence of lodging is sheltered sleeping.*"

However, there is also recognition that *"the distribution of accommodation types is neither homogeneous nor similar in all European countries"*. This is a similar finding to the analysis of alternative eco-labels in section 3.2, which highlights the difficulty in categorising the many types of tourist accommodation. To ensure the EU Ecolabel criteria are applicable to a

significant share of the European market, the definition of "tourist accommodation" must be inclusive of all TAS and CSS accommodation types.

The ANPA report offers two proposals for the definition on TAS, including a structure oriented approach (i.e. based on types of accommodation facilities), and a service orientated approach (i.e. based on the supplying of lodging and other services) to defining tourist accommodation.

Table 3 below outlines both of these approaches; considering each kind of accommodation (structure oriented approach) or each service, common to all accommodation types (service orientated approach). The table also reinforces "sleeping service" as the most relevant service across all types of accommodation.

Table 3: Consideration of tourism service by structure and by service

		Accommodation (structure)					
		Hotels	Camp sites (only bungalows)	Youth hotels	Alpine shelters	Agri-tourism	Bed and Breakfast
Service use phase	Sleeping	x	x	x	x	x	x
	Food service	x					
	Recreational activities	x					
	Transport activities	x					
	Communication	x					

Source: adapted from ANPA 2000, referenced in ANPA 2001

The ANPA report recognised that defining a product group which presents both goods and services is complex, as often the service cannot be easily separated from the good. However, separating services into fields of activity (e.g. sleeping or food service) can be a more comprehensive way of defining accommodation than by outlining the structure (e.g. hotels or bed & breakfast). The report also states that:

"…services are more homogeneous than structures, with the changing of geographical and local conditions or with the changing of accommodation structure. For example, the basic "hotel service" of providing a room, making the bed and supplying sanitary facilities is always so, independently from the hotel category or location, although the room may change and the environmental impacts of making and cleaning that room may change."

The conclusion that can be drawn from this report is that the 'service orientated approach' currently taken by both TAS and CSS criteria is the most comprehensive and does not require a complex analysis to better classify accommodation into types, such as hotel or bed and breakfast. From an environmental perspective, defining tourist accommodation as services (the service of providing lodging, plus the provision of other services such as leisure activities, food service or communal spaces) allows all activities to be considered in the scope of the EU Ecolabel criteria.
This approach to defining tourist accommodation should therefore be maintained.

2.5 Stakeholder feedback

In order to obtain feedback on the current EU Ecolabel criteria for TAS and CSS, a questionnaire was sent to stakeholders including tourist accommodation and camp site service providers, tour operators and agents, Competent Bodies, tourism or travel/trade associations and government bodies. The objective of this questionnaire was to check the validity of product group scope and definitions, and to analyse the need for modification of existing criteria. Overall, 98 responses were received; 72 hotels or camp sites (mainly consisting of 40 from France and 20 from Italy), 10 competent bodies, 2 government organisations, 8 travel/tourist associations, 1 tour operator and 5 other organisations.

Responses were received from Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Spain and UK. Outlined below is a summary of those questionnaire responses which relate directly to the scope and definition of tourist accommodation.

2.5.1 Merging TAS and CSS criteria

The consensus from the questionnaire was that merging the sets of criteria was a sensible approach, as long as separate criteria are developed where technical differences arise. However, a number of respondents suggested that merging these criteria may be impractical as camp sites and tourist accommodation are very different, both structurally (e.g. a hotel building versus a camping pitch) and based on the services they offer (e.g. room service and private bathrooms versus communal shower blocks). Each service may therefore have different abilities to influence environmental impacts, such as energy and water use. A number of respondents also highlighted the sometimes extreme difference between TAS and CSS, but suggested that actually the environmental criteria can be applicable to both; merging these is therefore feasible.

For the TAS and CSS criteria to be merged, it will therefore be important to make some technical distinctions between the two service types. For example, the use of chemical toilets will only apply to campsites. To resolve this, separate definitions for TAS and CSS can be maintained to ensure that these technical distinctions can be made where merging of criteria is not possible.

Overall, feedback supports the creation of one set of criteria, titled "tourist accommodation". A few respondents showed concern that this definition may exclude campsites but, as outlined above, separate definitions for TAS and CSS will be maintained under the product group "tourist accommodation" to clarify which (of TAS or CSS) these criteria relate to.

2.5.2 Accommodation services

As outlined in section 2.3, above, the current definitions for TAS and CSS include the provision, under the management or ownership of the accommodation, of food services and leisure activities. The stakeholder questionnaire asked whether or not all services were covered under this definition; several respondents noted that conference rooms/training rooms (i.e. the provision of a room for an event such as a meeting or conference) should be included in this list, where this service is incidental to the provision of accommodation.

It is suggested that the current scope of the criteria be extended to consider this. This would result in the following being added to existing TAS and CSS definitions (new additions are underlined):

Proposal for revised scope:
The provision of tourist accommodation may include the provision of food services, fitness and leisure activities, green areas and/or conference facilities. *In the framework of this Decision, food services include breakfast; fitness and leisure activities/facilities include saunas, swimming pools and all other such facilities, which are within the accommodation grounds, green areas include parks and gardens, which are open to guests and conference facilities includes the provision of a room for singular events such as business conferences, meetings or training events.*

2.6 Scope of tourist accommodation

Table 4 below summarises some of the specific types of accommodation which have been outlined in various definitions of tourist accommodation. Next to each is an indication of whether these are included under definitions for TAS and CSS. Overall, the current EU Ecolabel definitions for TAS and CSS encompass all relevant accommodation types.

Table 4: Types of tourist accommodation

Type of accommodation	Covered in the EU Ecolabel definitions?
Hotel (Large, medium or small)	✓ included in TAS definition
Motel	✓ included in TAS definition
Group accommodation and holiday homes	✓ included in TAS definition
Hostel	✓ included in TAS definition
Bed & breakfast	✓ included in TAS definition
Guest houses or rental apartments	✓ included in TAS definition
Lodges	✓ included in TAS definition
Visitor flats or bungalows	✓ included in TAS definition
Chalets or cabins	✓ included in TAS definition
Camp sites (provision of pitches for tents or other mobile structures such as motor homes)	✓ included in CSS definition
Bungalows, rental mobile lodging and apartments	✓ included in CSS definition

2.7 Summary

Very few formal definitions or scope documents for tourist accommodation or related accommodation provision have been developed. The types of accommodation (e.g. hotel, bed and breakfast or hostel) are often separately defined, however. To maintain consistency with other definitions and categorisations of tourist accommodation, the EU Ecolabel should include these varying types of accommodation in scope.

Where more detailed definitions (such as NACE codes) have been developed, these define tourist accommodation in a similar way to the current EU Ecolabel criteria – definitions relate to specific characteristics such as to the provision of sheltered accommodation (or pitches for camp sites) or the types of services that are offered (such as the provision of food services). The current scope and structure of the TAS and CSS definitions should therefore be maintained (with the addition of conference facilities as outlined in section 4) for the merged product group, tourist accommodation.

2.8 Proposed definitions

Although the criteria for TAS and CSS will be merged into one set of criteria, it is important to recognise that 'tourist accommodation' and 'camp sites' are two very distinct product groups - as shown by these being separately defined in other labels and schemes identified in the section above. It is therefore proposed that the new EU Ecolabel criteria for "tourist accommodation" will define these separately. This will allow for a more practical approach to merging the two sets of criteria: where more technical characteristics between the product groups cannot be merged, the criteria will distinguish which criteria apply to which product group.

A review of alternative labels and schemes for tourist accommodation has also shown that the existing EU Ecolabel definitions for TAS and CSS are still adequate. These were developed by taking into account the significant environmental hotspots of tourism and the wide range

of types of tourist accommodation available. There have been no significant changes in either of these factors, and so a revision or re-scope of the definition is not required. The revised criteria for "tourist accommodation" will therefore define TAS and CSS as they are in the current EU Ecolabel criteria document. These definitions are outlined below.

2.8.1 Tourist accommodation

The merged product group "tourist accommodation" will be defined as:

Proposal for merged product group definition:

The product group "tourist accommodation" comprises:

The provision of tourist accommodation services and/or campsite services

Tourist accommodation services:

The product group 'tourist accommodation service' shall comprise the provision, for a fee, of sheltered overnight accommodation in appropriately equipped rooms, including at least a bed, offered as a main service to tourists, travellers and lodgers.

Campsite services:

The product group 'campsite service' shall comprise, as a main service provided for a fee, the provision of pitches equipped for mobile lodging structures within a defined area. Mobile lodging structures as referred are those such as tents, caravans, mobile homes and camper vans. Accommodation facilities suitable for the provision of shelter to lodgers are facilities such as bungalows, rental mobile lodging and apartments.

It shall also comprise other accommodation facilities suitable for the provision of shelter to lodgers and collective areas for communal service if they are provided within the defined area. Collective areas for communal services are such as washing and cooking facilities, supermarkets and information facilities.

The provision of tourist accommodation may include the provision of food services, fitness and leisure activities, green areas and/or conference facilities.

In the framework of this Decision, food services include breakfast; fitness and leisure activities/facilities include saunas, swimming pools and all other such facilities, which are within the accommodation grounds, green areas include parks and gardens, which are open to guests and conference facilities includes the provision of a room for singular events such as business conferences, meetings or training events.

2.9 Review of legislation

Since the previous (2009) revision of EU Ecolabel criteria for TAS and CSS, there have been several changes in legislation. These need to be considered in the criteria update for "tourist accommodation" to ensure that criteria reflect current legislative requirements. These include:

2.9.1 Directive 2009/125/EC of 21 October 2009 and Directive 2010/30/EU of 19 May 2010

On 21 October 2009, the EU adopted Directive 2009/125/EC on Ecodesign (integrating environmental aspects into the design of a product). The aim of this directive is to reduce the environmental impact of products, including energy consumption throughout their entire life cycle. The Directive applies to all energy-using products placed on the EU market, as well as parts of products which can be assessed independently. It is complemented by Directive 2010/30/EU on Energy Labelling.

The purpose of the Ecodesign Directive is to allow the European Commission to regulate the minimum performance of products; thus encouraging the market to 'move away' from the worst performing products. In addition, the Energy Label allows products to be classified according to their energy efficiency, with an A to G scale (A being the most efficient and G the least efficient). By providing this information to consumers, they are encouraged to purchase more efficient products. There is reference to energy-using products throughout the EU Ecolabel criteria for TAS and CSS including household appliances such as cookers and refrigerators. It will therefore be important for any tourist accommodation criterion to reflect best practice in terms of energy efficiency and align with the Ecodesign and Energy Labelling Directives to promote the most efficient products.

2.9.2 EU Ecolabel Regulation 66/2010

The Regulation EC/1980/2000 for a *revised Community eco-label award scheme* has been replaced by Regulation EC/66/2010; the *EU Ecolabel* to increase its effectiveness and streamline its operation. The revised EU Ecolabel Regulation was adopted on 25th November 2009 and entered into force on 19th February 2010.

Article 6 (3) General requirements for EU Ecolabel criteria: Although the EU Ecolabel is predominantly concerned with environmental issues, the EU Ecolabel Regulation 66/2010 (Article 6 (3e)) does allow social aspects to be considered, where they are relevant. This might include, for example, making reference to related international conventions and agreements such as relevant International Labour Organization (ILO) standards and codes of conduct.

Article 6 and Article 7 of the EU Ecolabel Regulation 66/2010: This regulation prevents the EU Ecolabel from being awarded to goods containing substances or preparations/mixtures meeting the criteria for classification as toxic, hazardous to the environment, carcinogenic, mutagenic or toxic for reproduction (CMR), in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, nor to goods containing substances referred to in Article 57 of Regulation (EC) No 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (substances of very high concern).
Although tourist accommodation is classified as a service, rather than goods, the criteria do refer to products including detergents, disinfectants, shampoos etc. which may be affected by these articles. Where the criteria requirements is for these products to have the EU Ecolabel, Article 6 and 7 will be adhered to, as this is the requirement of all Ecolabelled products. Where there is no requirement for the Ecolabel but criteria refer to the use of relevant products, a risk based approach should be taken; where there is a chance that hazardous chemicals may be used Article 6 and 7 should be considered or referenced in the criteria text.

2.9.3 EU Ecolabel criteria updates

Since the 2009 revision of the TAS and CSS criteria, EU Ecolabel criteria have been developed for sanitary tapware and flushing toilets and urinals. In both cases, these product groups should be considered for the water criteria. As with other product groups where EU Ecolabel criteria have been developed, the tourist accommodation criteria should encourage the use of

these Ecolabelled products (or similar products which meet these high environmental standards) by awarding points where these have been installed.

Both of these criteria provide thresholds for water use, which should be considered when updating the tourist accommodation criteria. Details of these are provided below:

Commission Decision of 21 May 2013 establishing the ecological criteria for the award of the EU Ecolabel for sanitary tapware:

The current criteria for TAS and CSS require the following:

- Mandatory criterion 11. Water flow from taps and showers: shall not exceed 9 l/minute.
- Optional criterion 52. Water flow from taps and shower heads: shall not exceed 8 l/minute.

The new EU Ecolabel criteria for sanitary tapware require products to meet the following maximum water flow rates (Table 5):

Table 5: Maximum available water flow rates for EU Ecolabel sanitary tapware

Product sub-group		Water flow rate [l/min]
Kitchen taps	Without flow limiting device	6.0
	With flow limiting device (*)	8.0
Basin taps	Without flow limiting device	6.0
	With flow limiting device (*)	8.0
Showerheads and showers (**)		8.0

(*) The flow limiting device must allow for setting the default water flow rate (water-saving setting) at the value of a max of 6l/min. The maximum available water flow rate shall not exceed 8l/min

(**) Showerheads and showers with more than one spray pattern shall fulfil the requirements for the setting with the highest water flow.

Source: Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:145:0006:0030:EN:PDF

The maximum flow rate specified in the tourist accommodation criteria will therefore need to be rationalised to better reflect the best practice environmental criteria met by EU Ecolabelled sanitary tapware.

Commission Decision of 7 November 2013 establishing the ecological criteria for the award of the EU Ecolabel for flushing toilets and urinals:

The current criteria for TAS and CSS requires the following for toilets and urinals:

- Mandatory criterion 13. Urinal flushing: all urinals shall be fitted with either automatic (timed) or manual flushing systems.
- Optional criterion 53. WC flushing: 95% of WCs shall consume 6 l/full flush or less.
- Optional criterion 61. Water saving urinals: all shall use a waterless system or have a system which permits single flushing of every urinal only when used.

Current TAS and CSS EU Ecolabel criteria do not require a limit to be placed on the flush volume of urinals. However, the recent EU Ecolabel criteria for flushing toilets and flushing urinal equipment specifies the following (Table 6):

Table 6: Maximum limit for full flush volume of EU Ecolabel flushing toilet and flushing urinal equipment

Product	Full flush volume [l/flush]
Flushing toilet equipment	6.0
Flushing urinal equipment	1.0

Source: Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:299:0038:0051:EN:PDF

Additional criteria updates:

Since the previous TAS and CSS revision, a number of criteria for other products groups have also been developed or revised. Although these product groups are not directly referred to in

the tourist accommodation criteria, they are products which may be purchased by hotels, camp sites etc. and so should be considered in the criteria revision. These include:

- Light sources (Commission Decision of 6 June 2011 establishing the ecological criteria for the award of the EU Ecolabel for light sources (2011/331/EU)).
- Textile products (Commission Decision of 9 July 2009 establishing the ecological criteria for the award of the Community Ecolabel for textile products (2009/567/EC)).
- Bed mattresses (Commission Decision of 9 July 2009 establishing the ecological criteria for the award of the Community Ecolabel for bed mattresses (2009/598/EC)).

2.9.4 Other regulatory updates

Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast):

This Directive outlines the methodology by which energy performance of buildings can be improved. The Directive states that:

> *"Buildings account for 40% of total energy consumption in the Union. The sector is expanding, which is bound to increase its energy consumption. Therefore, reduction of energy consumption and the use of energy from renewable sources in the buildings sector constitute important measures needed to reduce the Union's energy dependency and greenhouse gas emissions."*

The energy efficiency of the building is very significant for tourist accommodation. Several of the existing EU Ecolabel TAS and CSS criteria relate directly to this. The following definitions outlined in the Directive on the energy performance of buildings are of particular significance and should be carried across to the tourist accommodation criteria:

- *'energy from renewable sources'* means energy from renewable non-fossil sources, namely wind, solar, aero thermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases
- *'energy performance certificate'* means a certificate recognised by a Member State or by a legal person designated by it, which indicates the energy performance of a building or building unit, calculated according to a methodology adopted in accordance with Article 3
- *'cogeneration'* means simultaneous generation in one process of thermal energy and electrical and/or mechanical energy
- *'air-conditioning system'* means a combination of the components required to provide a form of indoor air treatment, by which temperature is controlled or can be lowered
- *'boiler'* means the combined boiler body-burner unit, designed to transmit to fluids the heat released from burning
- *'district heating'* or *'district cooling'* means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from a central source of production through a network to multiple buildings or sites, for the use of space or process heating or cooling
- *'heat pump'* means a machine, a device or installation that transfers heat from natural surroundings such as air, water or ground to buildings or industrial applications by reversing the natural flow of heat such that it flows from a lower to a higher temperature. For reversible heat pumps, it may also move heat from the building to the natural surroundings.
- '*nearly zero-energy building*' means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy

from renewable sources, including energy from renewable sources produced on-site or nearby

Article 6 and 7 of Directive 2010/31/EU also outline best practice for considering energy efficiency when a building is being constructed or undergoing renovation. These actions may be better promoted in the revised tourist accommodation criteria.

- **Article 6:** For new buildings, Member States shall ensure that, before construction starts, the technical, environmental and economic feasibility of high-efficiency alternative systems such as those listed below, if available, is considered and taken into account:
  - decentralised energy supply systems based on energy from renewable sources
  - cogeneration
  - district or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources
  - heat pumps.
- **Article 7:** Member States shall encourage, in relation to buildings undergoing major renovation, the consideration and taking into account of high-efficiency alternative systems, in so far as this is technically, functionally and economically feasible.

Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC):
This Directive focuses on the importance of promotion and uptake of energy from renewable sources. Of most relevance is the following list of tools which could be used by tourist accommodation:

> *"In particular increasing technological improvements, incentives for the use and expansion of public transport, the use of energy efficiency technologies and the use of energy from renewable sources in transport are some of the most effective tools by which the Community can reduce its dependence on imported oil in the transport sector, in which the security of energy supply problem is most acute, and influence the fuel market for transport.*
>
> *For the purposes of proving to final customers the share or quantity of energy from renewable sources in an energy supplier's energy mix in accordance with Article 3(6) of Directive 2003/54/EC, Member States shall ensure that the origin of electricity produced from renewable energy sources can be guaranteed as such within the meaning of this Directive, in accordance with objective, transparent and non-discriminatory criteria."*

2.10 Review of alternative national eco-labels

Eco-labelling for tourism and travel is a crowded and competitive market. The travel industry supports many global and national certification schemes, labels and best practice criteria which have been developed to support growth in demand for responsible travel. The criteria for many other tourist-related certification schemes are similar to that of the EU Ecolabel. This is partly because many of these schemes, including Travelife and the Green Tourism Business Scheme (GTBS), are based on EU Ecolabel criteria. The most significant difference is that these schemes deal with wider sustainability issues and therefore include 'social' criteria. A short outline of alternative national eco-labels and schemes for tourism is listed below. (A more detailed review of these alternative eco-labels can be found in Section 4.3 and Annex II).

2.10.1 The Nordic Swan ('Hotels and youth hostels')

Like the EU Ecolabel, the Nordic Swan is a voluntary eco-labelling scheme based on the product's environmental impact over its lifetime. This scheme is run in five countries (Denmark, Finland, Iceland, Norway and Sweden) and was established in 1989. To date, there are 63 product groups for which the eco-label can be achieved; among these are 'Hotels and Youth Hostels'. A revised version of the criteria for this group was published at the end of 2013 with the new name: 'Hotels, restaurants and conference centres'. The new label can also be achieved just for conference centres or restaurants. However, if more than one service is provided in the same facility, the must all be included in the license. The Nordic Swan Label does not cover campsite services.

Like the EU Ecolabel, Nordic Swan for hotels focuses on energy consumption, waste and water management, detergents use and general hotel management, including requirements on procurement. There are mandatory and optional criteria, and additional points must be met for facilities with pools and outdoor spaces. Additional points are required also for hotels with conference centres and restaurants; these are not included within the scope of the EU Ecolabel for tourist accommodation. Unlike the EU Ecolabel, Nordic Swan sets mandatory limits for the consumption of energy and at least one other limit for water consumption, chemical products or waste management in relation to the number of guest-nights per year. However, the new criteria no longer have consumption limits for chemical products.

2.10.2 Das Österreichische Umweltzeichen (The Austrian ecolabel)

The Austrian ecolabel for tourism was the first national label aimed at this sector. The ecolabel aims to help customers in choosing products or services with the lowest impact on the environment. It concentrates on aspects of the environment, health and fitness for use.

This ecolabel is available for both hotels and campsite services. In the latter case, the criteria are the same as those for the EU Ecolabel. The Austrian criteria for tourist accommodation include social criteria such as optional points for supporting local business and for regional cooperation and integration. The label includes facilities with restaurants, conference centres and spas.

2.10.3 Malta Eco certification

The Eco certification scheme is Malta's national standard for hotels. It was developed by the Maltese Tourism Authority in 2002 and reflects the Green Tourism Scheme Criteria (see 2.10.3). To date, around 16% of 3-star to 5-star hotels have been certified through this scheme. The criteria were revised in 2012 to include considerations on social, cultural, economic, quality, and health and safety in addition to the original scheme, which focused on the environmental impacts of the tourism industry.

The criteria cover 11 main areas. In addition to the core areas present in the EU Ecolabel, Malta Eco certification includes criteria on purchasing, air quality, noise, building and green areas, and local culture and national surroundings. Mandatory and voluntary criteria have to be fulfilled.

2.10.4 Green Key ('Hotels', 'Campsites' and 'Small Accommodation')

Green Key is currently the largest environmental labelling scheme for the tourism sector. It is a non-governmental, not-for-profit scheme recognised by the United Nations Environment Programme (UNEP) and the World Tourism Organisation (UNWTO). The programme began in Denmark in 1994 and later became part of the Foundation for Environmental Education (FEE). It is now present in 28 countries and local administration centres are present in all participating countries.

Criteria are available for hotels and campsites. Separate criteria have been created to enabling the labelling of small accommodation services with fewer than 15 bedrooms. The Green Key programme is based on five core principles:

- Education of staff, clients and owners towards sustainable development and environmental awareness within the sectors.
- Reduction of the environmental impact of tourism in order to preserve the environment.
- Reduction of cost through reduction of consumption.
- Marketing strategy to promote the Green Key and labelled facilities.
- Strengthening the tourism industry by taking responsibility beyond the single facility.

2.10.5 Travelife sustainability criteria

Travelife is an international labelling scheme for the travel industry, which was developed by the industry itself. It aims to an affordable and fair certification scheme that helps tourism accommodation businesses be run in an environmentally and socially more sustainable manner. A scheme for tour-operators is also available.

Bronze, silver or gold awards are available depending on the number of criteria met. Overall, there are 99 mandatory and optional criteria for facilities to comply with. Accommodation services meeting only the mandatory criteria are awarded the bronze award. Optional criteria must be met for silver and gold awards. A number of mandatory and optional social criteria are present within the Travelife requirements. Examples include criteria on child labour, labour discrimination, sexual exploitation, local suppliers and local community relations.

2.10.6 Green Tourism Business Scheme criteria

The Green Tourism Business Scheme is run by a not-for-profit organisation and was funded in 1997. The scheme is run in the UK, Ireland and Canada and counts 2,300 members. The aim of this scheme is to drive the tourism sector towards sustainability. Business must show that they are committed to sustainable tourism and minimising their environmental impact, and meet standards of good practice with regard to energy efficiency, waste minimisation and water management. All business must operate according to local relevant legislation and must be committed to providing a good quality service.

As for the Travelife award, three different levels of awards are available. Once businesses become members, they establish a baseline and create an action plan, after which implementation of such activities begins. Finally the facilities are audited to evaluate the grading of the award. The Green Tourism Business Scheme is available not only to hotels, B&Bs and hostels, but also to visitor attractions, holiday parks, corporate offices, activity providers, conference venues, restaurants and cafes.

2.10.7 Global Sustainable Tourism Criteria ('Hotels and Tour Operators')

The Green Sustainable Tourism Criteria (GSTC) have been developed following decades of prior work on sustainable tourism worldwide, and take into account other standards and guidelines currently available. These criteria focus not only on environmental responsibility but also on the social, economic and cultural impacts of the tourism industry. The GSTC certification is currently available for hotels and tour operators, and for destinations. The latter are currently under public consultation, whereas the second version of the hotels and tour operators' criteria were published in 2012 after three years development and public consultation.

The criteria aim to serve as basic guideline for more sustainable management and are considered to be the minimum that businesses should strive to achieve. GSTC criteria are designed to be adapted to the local conditions and laws and are supplemented by additional

criteria for specific locations and activity. Finally, GSTC also take into account the quality of the service by requiring tourism businesses to measure customer satisfaction.

Table 7: Comparison of alternative eco-labels for tourist accommodation

Criteria	Nordic Swan	Austrian Ecolabel	Malta Eco	Green Key	Travelife	Green Tourism Business Scheme	Global Sustainable Tourism Criteria	EU Ecolabel
Environmental (energy, water, waste, chemicals)	✓	✓	✓	✓	✓	✓	✓	✓
Environmental (biodiversity)	✓	✓	✓	✓	✓	✓	✓	✓
Environmental (management)	✓	✓	✓	✓	✓	✓	✓	✓
Fitness for use/quality of service			✓					
Organic/local food and procurement		✓	✓	✓	✓	✓		✓
Cultural impact		✓	✓		✓	✓	✓	
Fair employment practices (above legal requirements)					✓		✓	

3 Market analysis (Task 2)

Section summary:

Tourism is a growing sector worldwide and is recognised as one of the world largest industries. For example, the UN World Tourism Organization (UNWTO) reports that tourism contributes to 9% of GDP (direct, indirect, induced impact) and provides 1 in 11 jobs globally. Even within the European Union, tourism plays a major role within the economy. It is the third largest economic activity following the distribution and construction sectors.

The accommodation sector, which describes the tourist accommodation services defined in the EU Ecolabel criteria accounts for around 10% of the number of enterprises, employees and turnover within the overall tourism related activities. Four EU-28 countries are leaders within the field of accommodation services; Germany, France, the UK and Italy account for more than 50% of both the turnover and the number of people employed within businesses related to tourism. These countries are also amongst the top 10 destinations for international arrivals. Analysis of sectorial statistics shows that accommodation establishments are dominated by small and medium sized enterprises.

It is generally accepted that the market and demand for sustainable tourism is growing; however, no official statistics are available to document this shift, particularly regarding the market share of sustainable accommodation businesses. Data available is mainly related to consumer surveys. For example, a Trip Advisor survey found that 79% of travellers globally "think that it's important that accommodation providers have eco-friendly practices". 91% of accommodation providers agreed that it is important to be eco-friendly but only 77% responded they have environmentally friendly policies in place.

Testimony to this shift is the fact that the ten major European hotel chains have all shown a commitment towards reducing their environmental impact. This shows that environmental awareness is becoming an important factor within the accommodation industry. Finally, many of these companies are working towards achieving third-party certification to recognise their efforts to reduce their environmental impact. The most notable example is the Carlson Rezidor Hotel Group that is aiming to gain accreditation for 100% of its hotels by 2015. A number of environmental labels specific to the tourism sector have been used. However, Best Western France and Austria are the only ones among the leading hotel chains choosing to use the EU Ecolabel.

3.1 Introduction and aim

The aim of this section of the report (Task 2, market analysis) is to update and/or collect key figures which will enable quantitative assessment of the economic relevance of TAS and CSS. The market analysis will provide information on the functioning of the market for tourist accommodation (both from the provider and consumer perspective) in order to identify relevant trends, drivers, innovations, market segmentations and initiatives.

The following sections provide a summary of the main characteristics of the tourist accommodation and campsite market, based on an analysis of European statistical data and other data sets with a focus on tourist accommodations. Information is provided about the tourist accommodation providers with the highest market share, including any specific environmental initiatives which they are currently undertaking. An overview of these points is then provided; this overview summarises that information collected in the market analysis which may have a direct impact on the updating of EU Ecolabel criteria for tourist accommodation.

3.2 Tourism sector overview

Travel and tourism is a growing sector, and is recognised as one of the world's largest industries [Centre for Responsible Travel (2012)]. Despite the uncertain global economic outlook over recent years, the travel and tourism industry has remained resilient, and continues to be a critical sector for economic development and for sustaining employment. According to the UN World Tourism Organization (UNWTO), tourism contributes to over 9% of the world's GDP (direct, indirect and induced impact) and is responsible for 1 in 11 jobs [UNWTO (2014)].

In the EU, tourism is the third largest economic activity, following the distribution and construction sectors [European Commission (2010)]. The tourism industry in the EU-28 employed over 3 million people in 300,000 enterprises, generating €380 billion in turnover in 2010. These numbers refer to activities which provide services mainly for tourists. Indirect activities which provide services to both tourists and non-tourists employed an additional 12 million people, generating nearly €1 trillion in 2010. Overall, in 2010, industries with tourism related activities accounted for 6% of the turnover, 9% of the value added, and 11% of the persons employed in the non-financial business economy in the European Union [Demunter (2013)].

Furthermore, the EU-28 is the top tourist destination worldwide, with 411 million international arrivals in 2012. This represented 40% of all international arrivals across the world [UNWTO (2014)]. France, Spain, Italy, Germany and the UK were among the top ten countries by tourist arrivals in 2012 [UNWTO (2013)].

The financial and economic crisis affecting the world economy since 2008 has had significant effect on the demand for tourism services in Europe. International arrivals dropped between 2008 and 2009, but have since grown to above pre-crisis levels and are predicted to grow in the future. According to UNWTO, European arrivals (including non EU-28 countries) will increase from 475 million in 2010 to 620 million in 2020 [UNWTO (2013)].

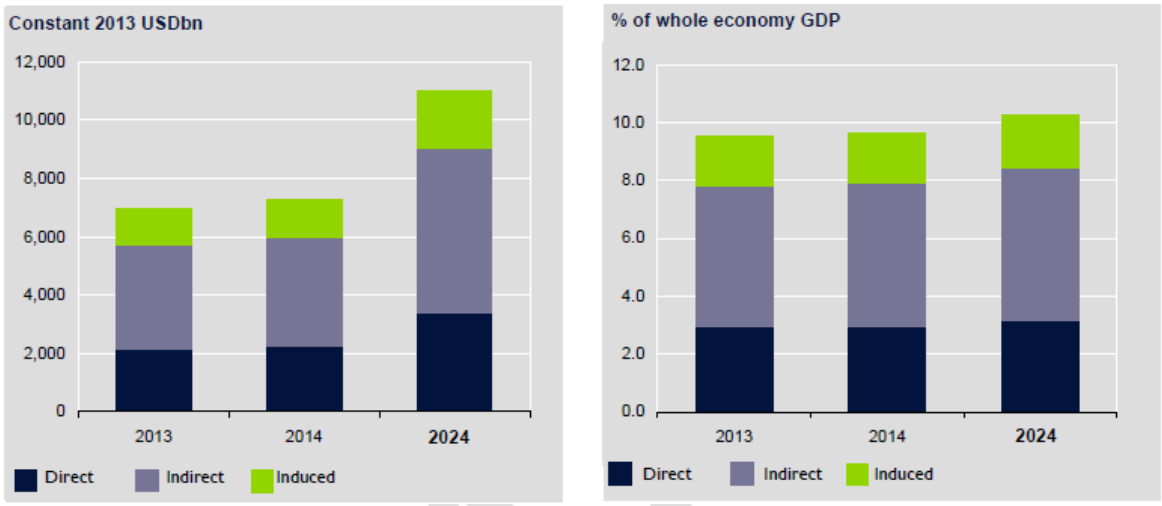
3.2.1 Overview of global tourism sector

The global travel industry has been growing over the past year despite the financial crisis affecting the global economy. In 2013, according to the World Travel and Tourism Council (WTTC), the total contribution to the global economy of the tourism industry has grown for the fourth consecutive year, reaching 9.5% of GDP (Figure 3). This includes direct, indirect and induced impacts on the economy. The direct contribution was of 2.9%. It is forecast that this

will grow by 4.3% in 2014 and have an annual growth of 4.2% until 2024, reaching 10.3% of GDP [WTTC (2014)].

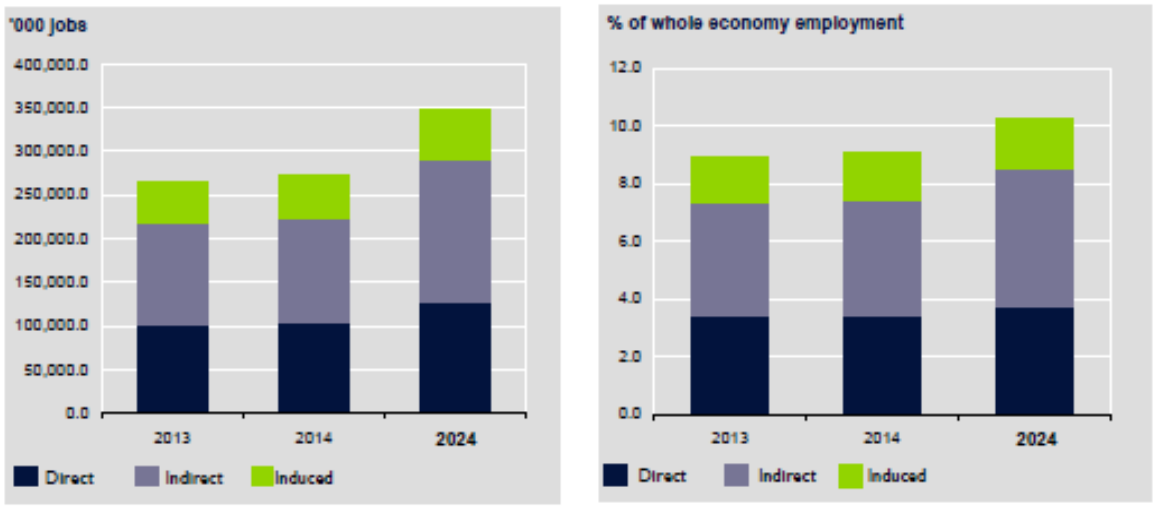
The industry created over 100 million jobs directly in 2013; this represented 3.4% of total employment (Figure 4). It is predicted that this figure will rise by 2.2% in 2014 and will rise by 2% per annum over the next decade, reaching over 125 million jobs in 2014. Indirect employment accounts for 8.9% of total employment. This is expected to rise to 10.2% of total global employment in 2024, generating nearly 350 million jobs [WTTC (2014)].

Figure 3: Travel and tourism contribution to global GDP



Source: WTTC (2014)

Figure 4: Travel and tourism contribution to global employment



Source: WTTC (2014)

3.2.2 Overview of tourism sector in EU-28

In 2010, the wider tourism industry employed 15.2 million people through 3.4 million enterprises. This equates to 29% of the European services industry in 2010. The share of total turnover of these enterprises was considerably lower, at 25%. This is likely to be due to the large number of SMEs present in this sector, the seasonality of tourism and the high proportion of part-time employees [Demunter (2013)].

As explained above, the tourism industries shown in Table 8, below, do not provide services solely to tourists. Therefore, the figures stated are an overestimate of the total turnover strictly related to tourism businesses. The subdivision 'mainly tourism' and 'partially tourism' tries to take this into account, with 'partially tourism' activities being those that are likely to

be used by both tourists and non-tourists. Restaurants are typical examples of this, as they offer services to both locals and tourists. Figures for 'mainly tourist' activities also show the significance on this sector within the European economy, although these activities represent around one quarter of the wider industry.

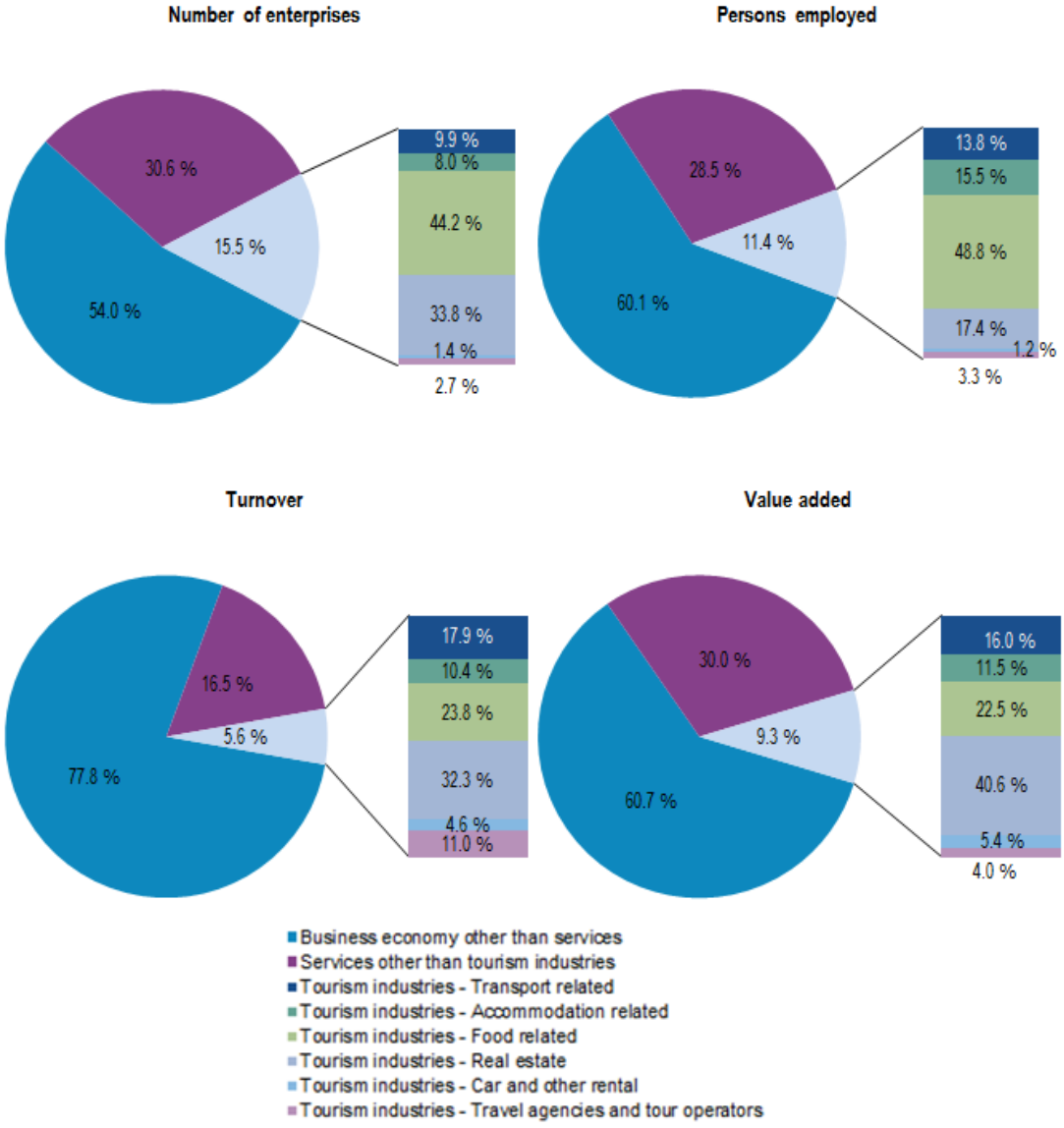
Table 8: EU-28 Tourism industry statistics in 2010

	No. of enterprises	No. of persons employed	Turn-over (million EUR)	Value added at factor cost (million EUR)
Passenger rail transport, interurban[1]	365	483,600	56,087	27,219
Taxi operation	282,396	593,857	18,665	11,210
Other passenger land transport n.e.c.[2]	40,726	564,135	33,724	18,409
Sea and coastal passenger water transport	6,036	74,852	17,493	5,537
Inland passenger water transport[3]	3,721	18,511	1,306	643
Passenger air transport[1]	3,401	355,100	109,089	25,996
Transport related	340,455	2,092,691	236,365	89,096
Hotels and similar accommodation	150,053	1,982,016	113,773	53,756
Holiday and other short-stay accommodation	91,523	254,012	14,545	5,870
Camping grounds, recreational vehicle parks and trailer parks	16,029	86,025	7,717	3,497
Other accommodation	12,029	43,168	2,014	888
Accommodation related	269,634	2,365,274	138,048	64,012
Restaurants and mobile food service activities	846,340	4,686,640	200,471	80,126
Other food service activities	28,931	611,539	30,328	14,132
Beverage serving activities	619,556	2,128,661	83,659	30,914
Food related	1,494,827	7,426,892	314,458	125,172
Buying and selling of own real estate[4]	117,843	182,612	40,149	9,889
Renting and operating of own or leased real estate	702,498	1,445,250	297,048	170,367
Real estate agencies	228,047	542,577	44,373	22,307
Management of real estate on a fee or contract basis	97,942	478,938	45,303	22,484
Real estate	1,146,330	2,649,377	426,873	225,183
Renting and leasing of cars and light motor vehicles[1]	27,617	131,400	52,000	26,110
Renting and leasing of trucks[5]	6,410	22,800	7,352	3,411
Renting and leasing of recreational and sports goods	12,714	26,323	1,858	719
Car and other rental	46,741	181,414	61,210	30,240
Travel agency activities	48,385	299,176	75,034	12,491
Tour operator activities	19,978	141,241	63,703	7,859
Travel agencies and tour operators	91,525	499,767	145,560	22,274
Other reservation service and related activities[6]	23,162	59,350	6,823	1,925
Total tourism industries	3,389,515	15,215,768	1,324,564	557,860
Mainly tourism	329,319	3,082,090	382,143	108,738
Partially tourism	3,060,196	12,010,168	938,225	447,338
Total services	10,088,825	53,260,448	5,254,787	2,342,716
Total non-financial business economy	21,927,107	133,577,542	23,755,067	5,955,387

Source: Demunter (2013)
Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.
NACE codes relating to tourism activities and other sectors as defined in the table above can be found in Annex III
[1] EU-28 aggregate for number of persons employed, turnover and value added is not including HR.
[2] EU-28 aggregate for number of enterprises is not including CZ, IE, EL and MT.
[3] EU-28 aggregate for turnover is not including DK, EE, IE, EL, LU, MT, NL, SK and FI.
[4] EU-28 aggregate for value added at factor cost is not including IE, EL, MT, NL and FI.
[5] EU-28 aggregate for number of persons employed is not including HR; EU28 aggregate for turnover and value added at factor cost is not including CZ, EE, IE, EL, ES, HR, LT, LU, MT and NL.
[6] EU-28 aggregate for turnover and value added at factor cost is not including CZ, EL, LU, MT and NL.

Figure 5 shows tourism as a share of the European economy in terms of number of enterprises, persons employed, turnover and value added. These pie charts highlight the importance of the tourism sector in Europe, particularly with regards to employment. Detailed data on the European tourism sector can be found in Annex V.

Figure 5: Tourism as a share of EU-28 economy, 2010



Source: Demunter (2013)

3.3 Accommodation services

The scope of the Ecolabel award for tourist accommodation services is defined in Section 2. Although this revision process aims to merge the criteria for TAS and CSS, the definitions for

these services will remain separate and unchanged. In this section, market statistics in relation to these services are presented and analysed.

Eurostat collects economic information from all Member States for a range of economic activities; these are classified by NACE 2 codes. These statistical classification codes are the subject of legislation at the European Union level, which imposes the use of the classification uniformly within all the Member States [Eurostat (2008)]. This allows for this data to be collated and compared.

The NACE codes which best align to the scope of the EU Ecolabel are described under code 55 *'Accommodation'.* More specifically, codes 55.1, 55.2 and 55.3 are of relevance to tourist accommodation; definitions for these are shown in Table 9. Code 55.90 *'Other Accommodation'* has not been included in the analysis as this includes services which are beyond the scope of the EU Ecolabel. This includes accommodation services such as school dormitories. The term 'tourist accommodation' refers to the aggregate of these three codes hereon.

Table 9: Accommodation services NACE 2 codes and definitions

NACE code	Name	Definition
55.1	Hotels and similar accommodation	The provision of accommodation typically on a daily or weekly basis, principally for shorts stays by visitors. This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making. A range of additional services may be provided (e.g. Hotels, motels, suite/apartment hotels).
55.2	Holiday and other short-stay accommodation	This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making. A range of additional services may be provided (e.g. Visitor flats and bungalows, youth hostels and mountain refuges).
55.3	Camping grounds, recreational vehicle parks and trailer parks	The provision of accommodation in campgrounds, trailer parks, recreational camps and fishing and hunting camps for short stay visitors and the provision of space and facilities for recreational vehicles (e.g. Campsites, trailer parks, facilities for placing tents).

Source: Eurostat (2008)

Table 10 and Figure 6 show how the accommodation sector is divided between the three different NACE codes described above. Hotels and similar accommodation represent nearly 60% of the number of enterprises, 85% of persons employed and 84% of turnover. These accommodation types are therefore the most prominent in Europe, are more labour intensive and generate a greater turnover per company compared to other accommodation facilities. Campsites represent by far the lowest number of enterprises; this is consistent with the fact that there are fewer ecolabelled campsites compared to tourist accommodation services.

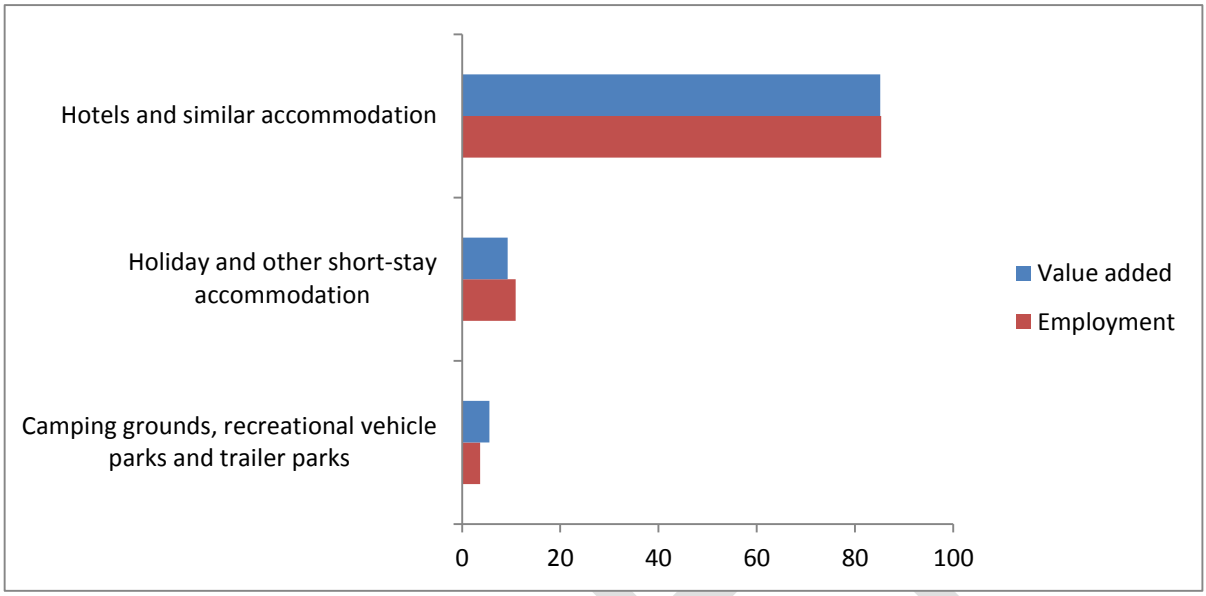
Table 10: Economic indicators for tourist accommodation services in the EU-28, 2010

NACE Code		Number of enter-prises	Number of persons employed	Turnover (million EUR)	Value added at factor cost (million EUR)
55.10	Hotels and similar accommodation	150,053	1,982,016	113,773	53,756
55.20	Holiday and other short-stay accommodation	91,523	254,012	14,545	5,870

55.30	Camping grounds, recreational vehicle parks and trailer parks	16,029	86,025	7,717	3,497
Total Accommodation		257,605	2,322,053	136,034	63,123

Sources: Eurostat Database

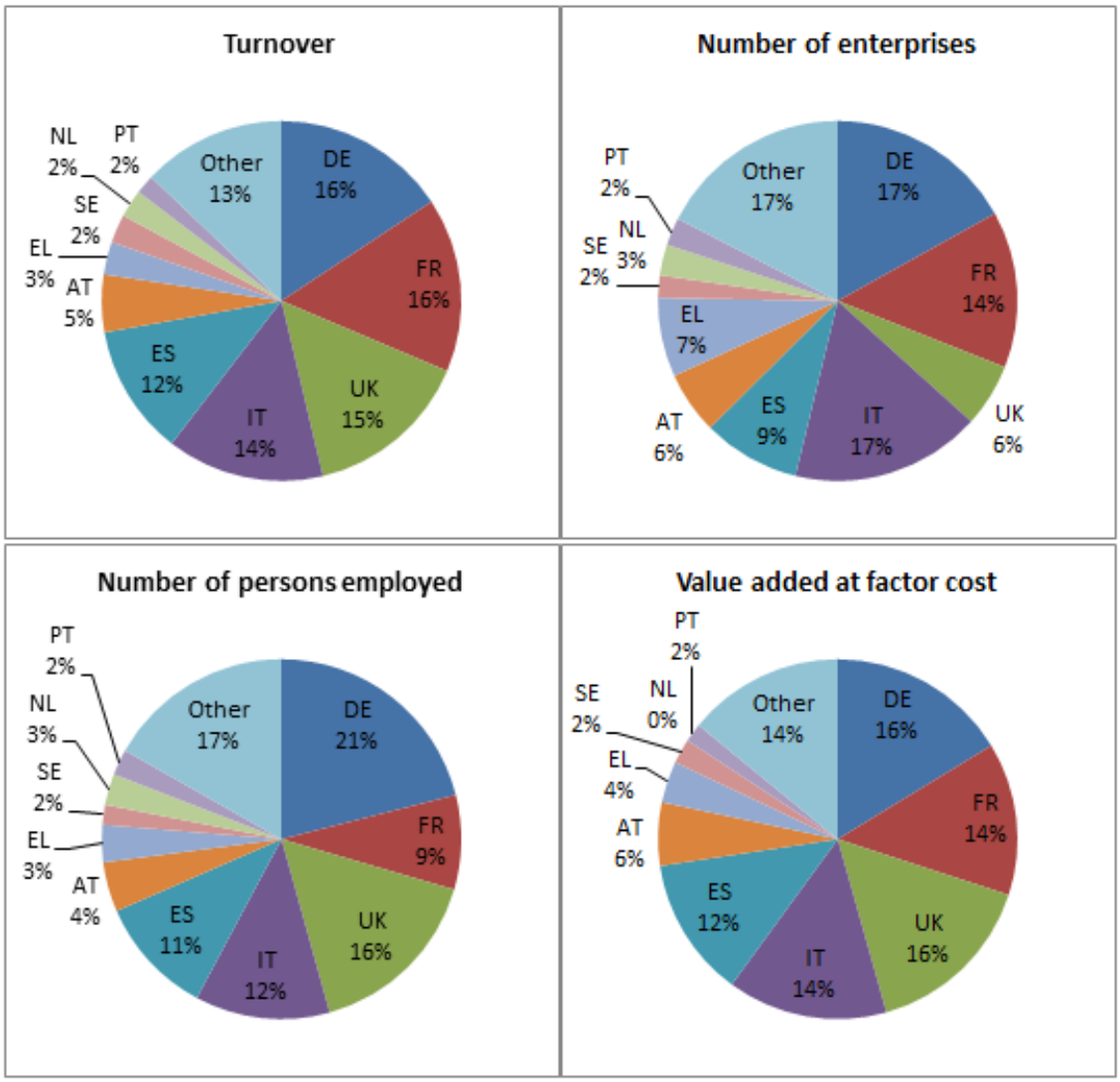
Figure 6: Value added and employment share by type of accommodation, 2010



Source: Eurostat Database; Oakdene Hollins analysis

Detailed accommodation statistics by country can be found in Annex VI. As is shown in Figure 7, ten EU-28 countries are responsible for over 80% of the European tourist accommodation sector. These countries are: Germany, France, the UK, Italy, Spain, Austria, Greece, Sweden, the Netherlands and Portugal in descending order by turnover. Moreover, the top four countries are responsible for over 50% of the total turnover, number of enterprises, number of persons employed and value added. These four countries represent the four largest European economies and it is expected that these represent a large proportion of this industry. However, the dominance of the four Member States is not only due to the size of the countries and their economies. As mentioned earlier, France, Italy, Germany and the UK were respectively ranked first, fifth, seventh and eighth in the world by number of international tourist arrivals in 2012 [UNWTO (2013), Tourism Highlights]. This further highlights the importance of the tourism sector in these countries and their role within the global travel industry.

Figure 7: EU-28 tourism indicators by country, 2010



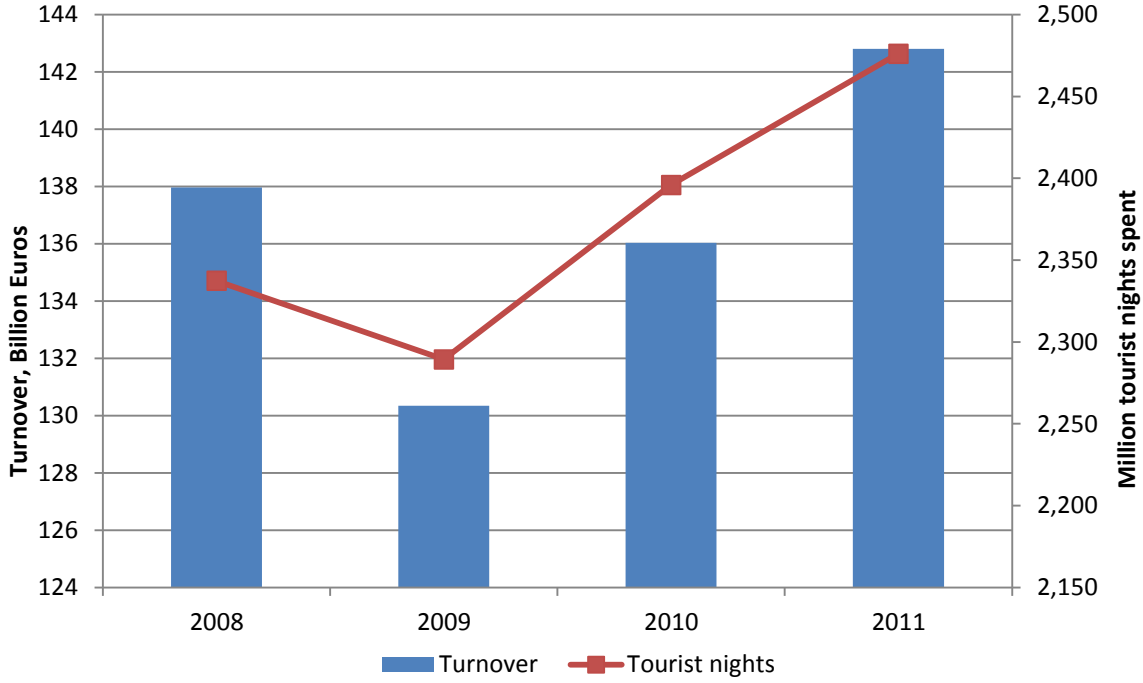
Source: Eurostat Database; Oakdene Hollins analysis
Note: Data for Malta is not included as this is not available. Data for Greece is for 2009.
Country codes can be found in Annex IV

3.4 Trends in EU accommodation sector

Turnover data for the tourist accommodation sector between 2008 and 2011 shows the effects of the global economic crisis on the European industry (Figure 8). Turnover of tourism establishments dropped by nearly 6% between 2008 and 2009. Although improved results were experienced in 2010, there was a full recovery to 2008 levels in 2011. Overall, a 4% increase in European turnover was reported from 2008 to 2011.

The graph also shows the trend in number of night spent by tourists in the same period of time, which is similar to that of turnover. Compared to turnover, number of nights experienced a smaller reduction (2%) between 2008 and 2009; the greater reduction in turnover may be due to cheaper hotel prices or increased use of other tourist establishments such as private accommodation facilities. The number of tourist nights recovered fully in 2010 and grew further in 2011. The number of nights spent by tourist increased by 6% between 2008 and 2011, again showing faster growth than turnover and suggesting the use of cheaper or alternative accommodation services [Eurostat (2012)].

Figure 8: EU-28 accommodation sector turnover and number of nights spent by tourists, 2008-2011

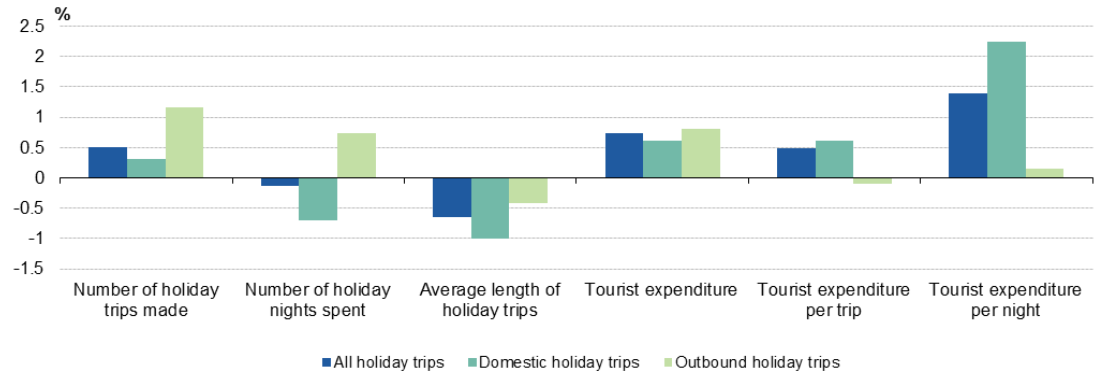


Source: Eurostat
Note: Turover data for Malta not available. Turnonver data for Estonia, Ireland, Greece, Latvia, Luxembourg and the Netherlands is incomplete. Data on number of nights not available for Ireland.

Figure 9 shows the percentage change between 2010 and 2011 for the main tourism indicators. The number of holiday trips made and tourist expenditure experienced a slight increase, consistent with increased turnover. Trips abroad experienced a stronger growth compared to domestic ones; this can be explained by the sharp fall in such trips during the first years of the crisis, whereas domestic trips were less affected. The figures also show that the average holiday length decreased between these two years, but the number of trips made increased, indicating a shift towards shorter holidays. This may also be due to the increased expenditure per night.

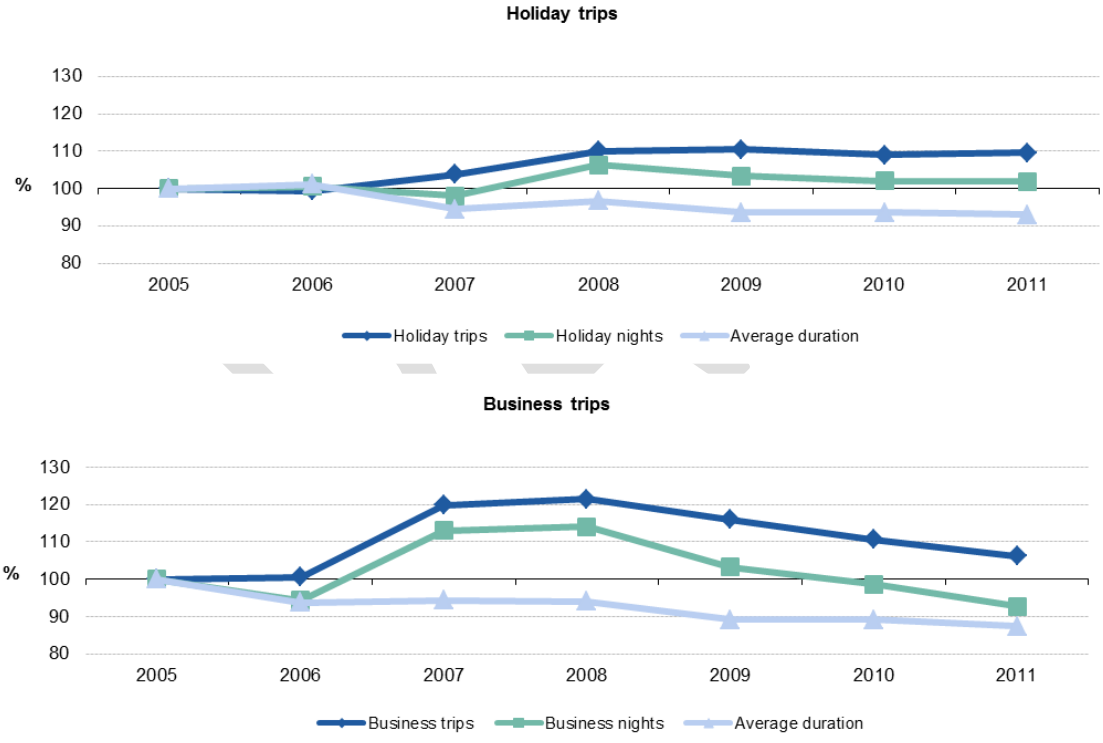
The economic crisis has had a larger impact on business travel compared to holiday trips. Figure 10 shows the trend in number of trips, night's spend and average duration of the trips made by EU-27 residents both for holiday and business trips. The number of holiday trips increased from 2005 through to 2009, followed by a dip in 2010. In 2011 figures nearly recovered to 2008 levels showing an overall reduction by 0.4%. As described above, although the number of trips did not vary significantly, the average duration of these trips has decreased by nearly 4%. Meanwhile, the number of trips for business reasons dropped significantly, from 166 million in 2008 to 145 million in 2011; a 13% reduction. The number of nights and length of trips also fell steadily.

Figure 9: Percentage changes in tourism demand in the EU-27, 2011 compared with 2010



Source: Eurostat (2012)
Note: Trips, nights spent and average length: EU-27 estimate not including IE, EL and MT.
Tourist expenditure: EU-27 estimate not including IE, EL, ES and MT.

Figure 10: Estimate trends in number of trips, nights spent and average duration of the trips made by EU-27 residents, 2005-2011 (index: 2005=100)



Source: Eurostat (2012)
Note: Not including MT (all trips), FR (business trips and nights because of break in series) and NL (business trips and nights). Includes estimates for BG (2005-2007), IE (2010 and 2011), EL (2010Q04 and 2011), CY (business trips and nights 2010), PL (2011Q04), PT (2007-2009), SE (2005), UK (nigths spent 2007, 2008Q01 and 2008Q03).

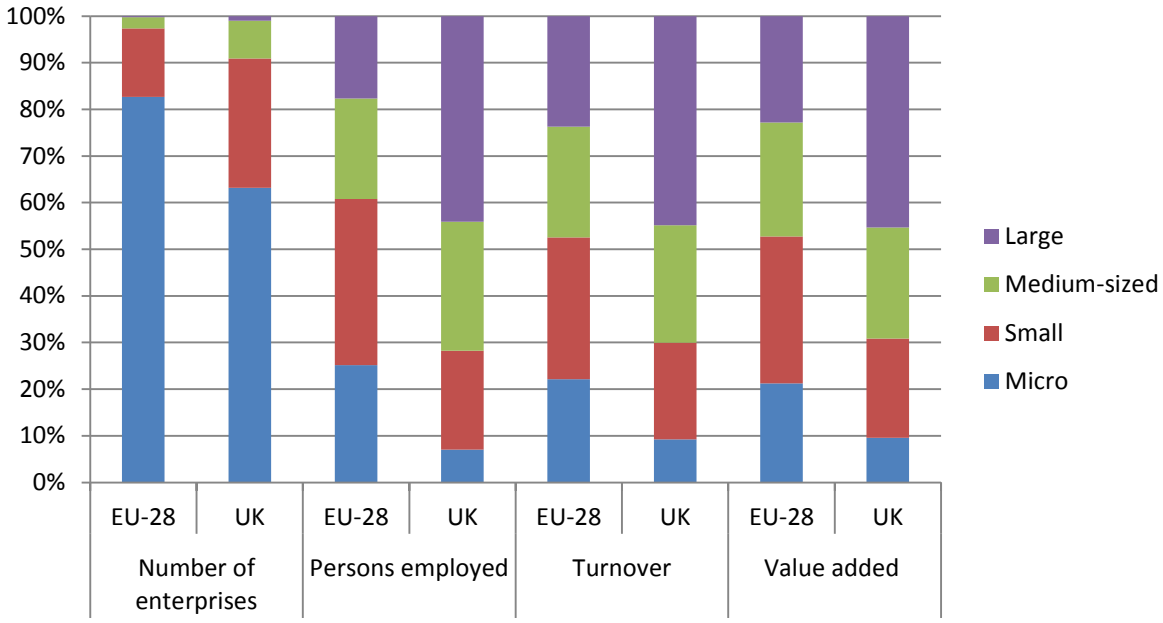
3.5 Market segmentation

3.5.1 Accommodation services by size

The tourism industry in Europe is characterised by the high number of SMEs in the market. According to a study published in 2012, large companies only accounted for 20% of the European tourist labour force and for 30% of turnover [TOURISMlink (2012)]. Figure 5 showed that the tourism industry accounted for 15.5% of all enterprises in the EU, but only 11.4% of the workforce and 5.6% of total turnover. These figures are consistent with a strong presence of SMEs within the tourism sector.

Data for the accommodation sector reflects the same results stated above (see Annex VII). Figure 11 shows the distribution of value added and number of people employed in the accommodation sector by size of enterprise. These figures are reported to Eurostat on a yearly basis as part of the Structural Business Statistics (SBS) database. Due to confidentiality reasons, the data are not complete; therefore, these percentages should be taken as indicative values.

Figure 11: Distribution of accommodation sector by size of enterprise, 2010



Source: Eurostat database
Note: EU-28 data does not include figures for Greece, the Czech Republic and Malta as these are not available. Data may not be complete due to confidentiality reasons.

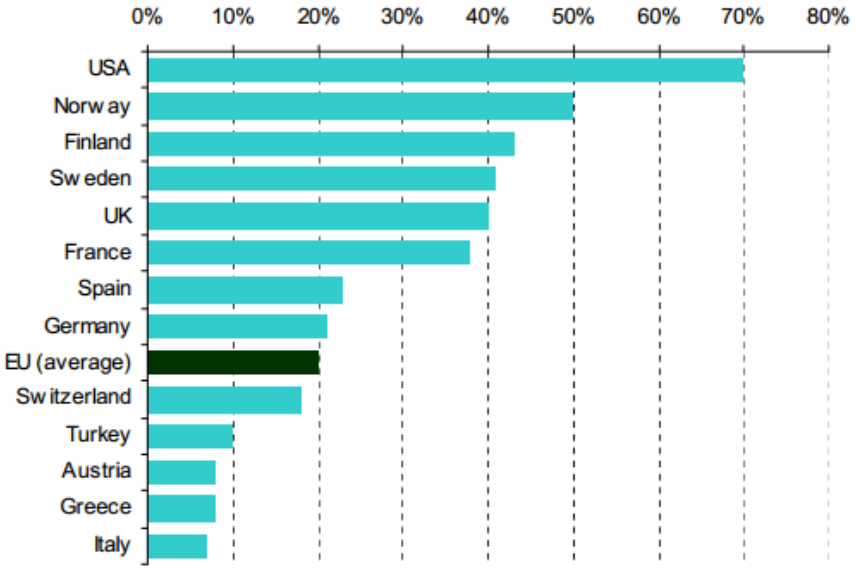
Micro-enterprises (employing 1 to 9 persons) account for 83% of the total number of enterprises present in the EU-28. Figure 11 also shows the distribution of these companies in the UK, as it is the EU country with the highest share of large (employing more than 250 people) of companies by turnover. In the UK, only 63% of facilities are micro enterprises; Cyprus and Slovenia are the only countries with a lower percentage of micro enterprises (56% and 58% respectively). In Belgium, France, Ireland, Poland and Slovenia over 90% of these businesses only employ between 1 to 9 people. Medium-sized (employing 50 to 249 people) and large accommodation companies represent a miniscule fraction of the market, with only 3% of enterprises throughout Europe. Cyprus is the only country where large and medium-sized enterprises represent more than 10% of the market (21%).
When number of people employed, turnover and value added are analysed, it is clear that the larger companies play an important role. Although there are a lower number of such companies, they employ a much higher number of people per business and equally generate a higher turnover. As Figure 11 shows, the percentage of the number of people employed in micro enterprises is 25% compared to 83% of company share. Small, medium-sized and large accommodation services employ 36%, 22% and 18% of the workforce respectively. Countries such as Finland, Slovenia and Ireland have a much higher prevalence of employees in micro sized companies, whereas the UK has the highest number of people employed by large hotels and similar services (44%).

European share of turnover and value added is distributed similarly to number of employees, with all sizes accounting for a roughly equal share. Once again, this indicates that medium and large size companies play an important role in the industry even though there are fewer of these enterprises. In countries such as the UK, Belgium and Luxembourg, large enterprises - which represent less than 1% of total number of businesses - register more than 30% of

turnover. This is also true for medium enterprises in countries such as Bulgaria, Croatia and Lithuania, where they account for less than 5% of total enterprises but over 60% of turnover.

The high prevalence of SMEs in the European hospitality sector is confirmed by the proportion of hotel rooms owned by integrated hotel chains. Figure 12 shows the fraction of hotel rooms which are part of integrated hotel chains for a number of countries. The figures show that the European market is markedly different to that of the USA. On average, around 20% of hotel rooms in the EU are part of hotel chains, while this number is up to 70% in the USA. A clear variation is also shown between different European countries. In northern European countries (Finland, Sweden, the UK), hotel chains own over 40% of total rooms. France and Spain also show high proportions; this may be because these two countries are home to some of Europe's largest hotel chains, such as Accor, NH Hoteles, Melia International (see Table 11). On the other hand, hotel chains in southern Europe account for a lower percentage of the market, as shown by figures for Greece and Italy [TOURISMLink (2012)].

Figure 12: Room share of integrated hotel chains per country



Source: TOURISMLink (2012)

Table 11: Top 10 hotel groups in Europe (2012, based on EU-27)

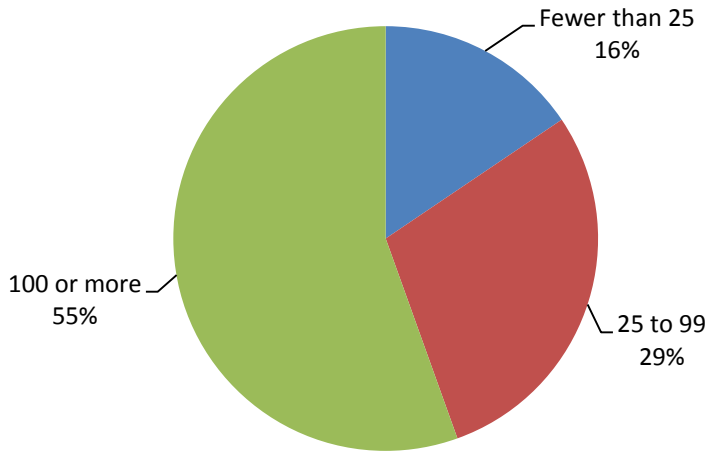
Rank 2012	Hotel Group	Hotels (2012)	Rooms (2012)
1	Accor	2,345	254,553
2	Best Western	1,316	89,743
3	Intercontinental Hotels Group	559	86,780
4	Groupe du Louvre*	956	67,687
5	Carlson Rezidor Hotel Group **	253	51,498
6	NH Hoteles	356	51,453
7	Whitbread Hotels & Restaurants	606	45,496
8	Melia International	201	45,145
9	Hilton Worldwide	184	43,189
10	TUI Hotels and Resorts	161	40,804
TOTAL		6,910	773,357

* Louvre Hotels Group/Concorde Hotels
**incorporating Park Plaza and Radisson Edwardian
Source: Hospitalitynet (2012)

Finally, Figure 13 shows the number of nights spent by tourists in twelve European countries by the number of available rooms in the accommodation facility. Once again, accommodation

services with 100 or more rooms represent a higher percentage compared to the number of existing enterprises. Obviously, although these represent a small fraction of the market by number of enterprise, these facilities have a higher number of rooms available and can accommodate for more guests.

Figure 13: Tourist nights by number of available rooms in twelve European countries, 2012



Source: Eurostat, Oakdene Hollins analysis
Data for Bulgaria, Czech Republic, Germany, Greece, Spain, Croatia, Latvia, Lithuania, Malta, Poland, Romania and Sweden.

3.5.2 Accommodation by geographic location

In this section, the European accommodation sector is analysed by geographic location of the hospitality establishments. Since 2012, Eurostat data on tourism include statistics based on the degree of urbanisation of accommodation enterprises; these statistics are used as a proxy for distinction between urban and rural areas.

A new classification with regard to urban areas has been recently produced by Eurostat, based on a combination of three criteria (geographical contiguity, population density and a minimum population threshold). It is based on population grid square cells of 1 km^2 so that the basic unit used is the same for all countries, allowing for comparison across different Member States [Eurostat (2013)].

The three degrees of urbanisation are classified as [Eurostat, (n.d.)]:

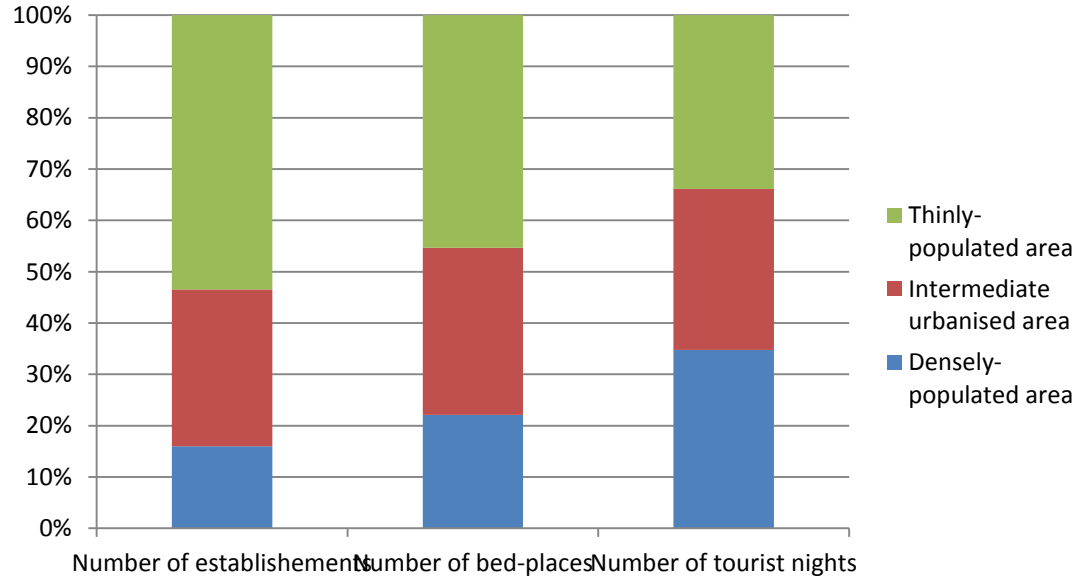
1. Densely populated area (alternative names: cities/large urban areas)
2. Intermediate density area (alternative name: towns and suburbs/small urban area)
3. Thinly populated area (alternative name: rural area).

Figure 14 shows the distribution of accommodation establishments, number of bed-places and number of tourist nights by degree of urbanisation (see Annex VIII). This shows that over 50% of establishments are located in thinly populated areas; this number is reduced to 45% when looking at number of bed-places and 35% for tourist nights. It can therefore be understood that hotels and other accommodation services located in rural areas are more likely to be small businesses. The smaller proportion of tourist nights could be due to the fact that rural holidays are more affected by seasonality. For example, beach-side destinations will only have a significant number of places occupied during the spring and summer seasons.

The opposite trend can be seen for establishments located in densely populated areas. Only 16% of businesses are located in this area, but these account for 22% of all bed-places. This implies that larger accommodation facilities are more likely to be located in these areas. In

terms of tourist nights, these are divided approximately equally for the three different geographic locations.

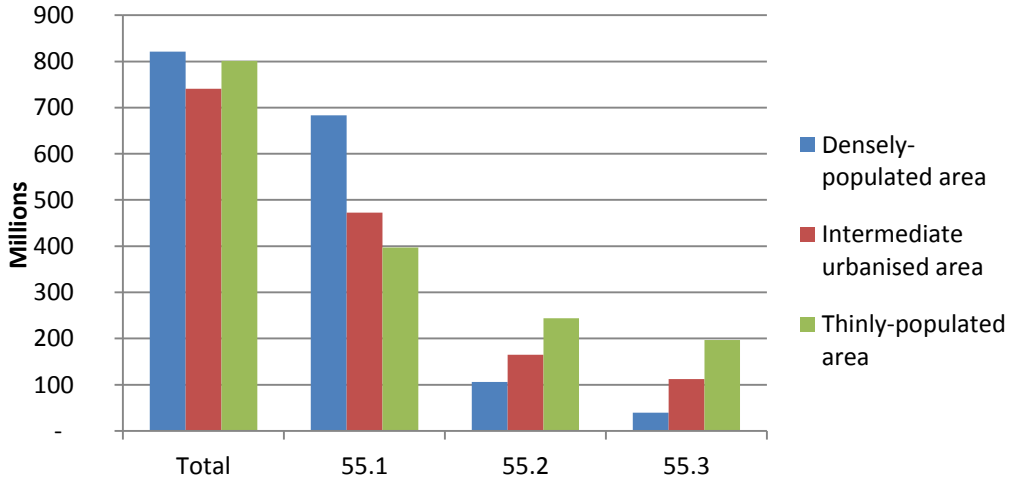
Figure 14: EU-28 accommodation sector statistics by degree of urbanisation, 2012



Source: Eurostat, Oakdene Hollins analysis
Note: Data for Ireland and Austria is not available. Data for Greece is incomplete

Figure 15 shows the share of tourist nights by different accommodation type and population density. The number of nights is approximately equal for all three geographical locations. The vast majority of tourist nights are spent in hotels rather than holiday accommodation services or campsites. As far as hotels (55.1) are concerned, these are mostly popular within densely populated areas, followed by towns and by rural areas. The other two types of accommodation services show opposite trends, the majority of tourist nights spent there are in facilities located in rural areas. However, hotels are still more popular than other types of accommodation even in these areas.

Figure 15: Number of tourist nights by accommodation NACE code and location in the EU-28, 2010



Source: Eurostat, Oakdene Hollins analysis
Note: Data for Ireland and Austria is not available. Data for Greece is incomplete
NACE code 55.1: Hotels and similar accommodation
NACE code 55.2: Holiday and other short-stay accommodation
NACE code 55.3: Camping grounds, recreational vehicle parks and trailer parks

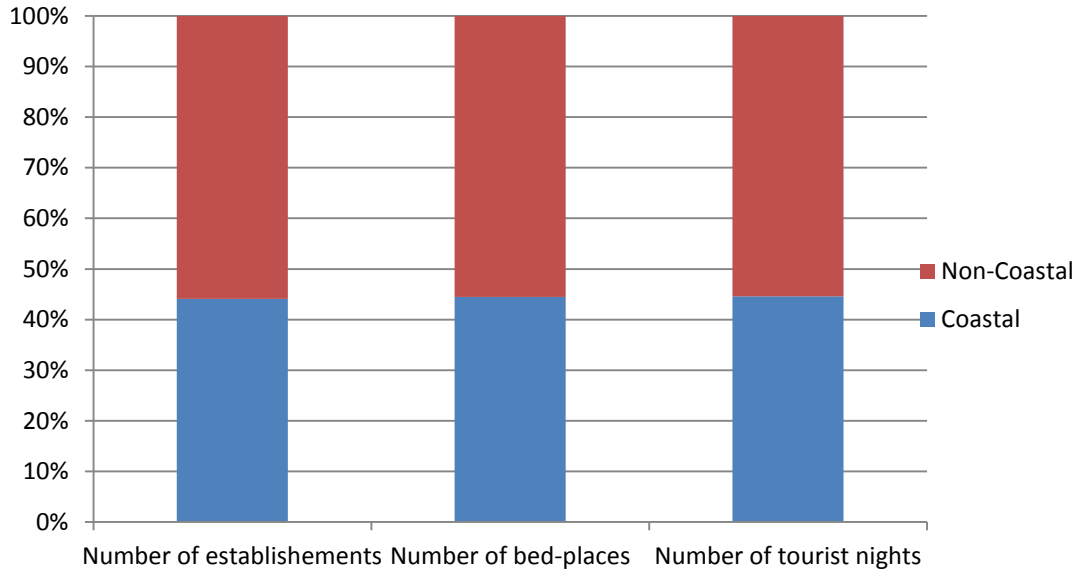
In this section, the European accommodation sector is also analysed by coastal and non-coastal areas. Eurostat data on tourism include statistics based on the position of the

accommodation facilities, i.e. whether these are close to the coast or not. The coastal and non-coastal categories refer to facilities located in municipalities (or equivalent local administrative unit) that are close to the sea or are not close to the sea. Municipalities bordering the sea are described as coastal. In addition, if a municipality is not bordering the sea but has 50% of its surface within a distance of 10km from the sea then it is considered to be coastal; all other areas are considered as non-coastal [Eurostat (2013)].

Figure 16 shows the number of establishments, number of bed-places and number of tourist nights by coastal and non-coastal areas (see Annex IX). As can be seen, unlike data on geographic location, the three different sets of data show approximately the same ratio. Note however that, using the above definitions, in the EU-28 only 11% of municipalities are coastal (12,090 municipalities compared to 100,997 non-coastal). These range between landlocked countries, such as Luxembourg and Romania with 0.7% of municipalities, and Malta with 100% of municipalities being defined as coastal [Eurostat (2013)].

Although only 11% of the EU is 'coastal', 44% of establishments, bed places and tourist nights are located in these areas. This suggests that there is a higher concentration of facilities in coastal regions compared to non-coastal regions. The fact that the ratio for the number of tourist nights and that of bed-places are approximately equal suggests that the number of establishments in each area closely matches demand. The data also suggest that the composition of facilities per size is comparable in the two areas.

Figure 16: Tourism statistics by coastal and non-coastal areas in the EU-28, 2012



Source: Eurostat
Note: Data for Ireland and Greece is not available. Data for Slovenia is not available for number of establishments.

3.6 International tourist arrivals

UNWTO collects annual data regarding international tourist arrivals. The figures for 2010 through to 2012 are show in Table 12; the EU-27 and more generally the wider European area is the most visited area in the world covering nearly 52% of the market. As stated above, France was the country with the highest number of international tourist arrivals with Spain, Italy, Germany and the UK also amongst the top ten destinations. The data show that the number of tourist arrivals grew between 2010 and 2012 in all regions, with an overall growth rate of 10%. The fastest growing regions were Africa, followed by Asia and the Pacific, and Central and Eastern Europe. However, Southern and Mediterranean Europe also experienced strong growth in the number of international tourist arrivals (10%).

Table 12: International arrivals per area, 2010-2012

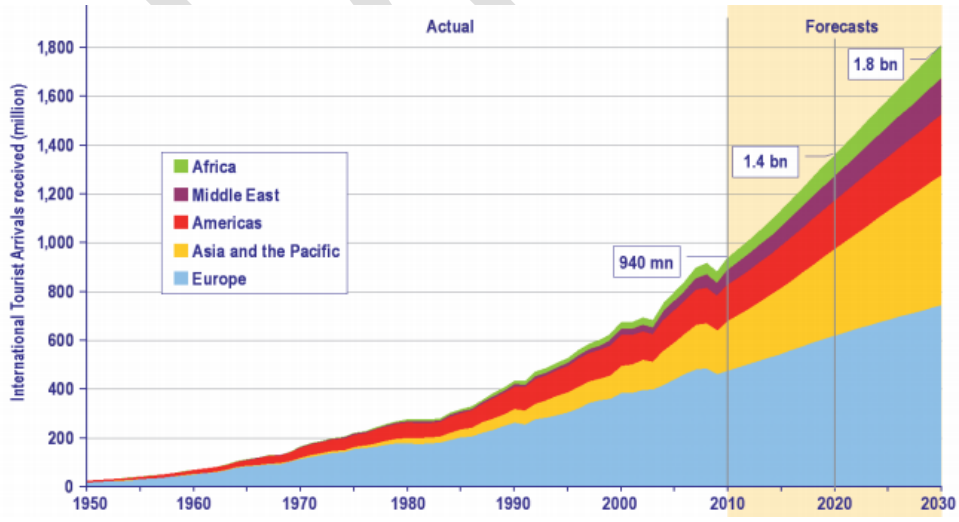
Area	International Tourist Arrivals (million)			Market share, 2012 (%)*
	2010	2011	2012*	
Europe	485.5	516.4	534.2	51.6
Northern Europe	62.8	64	64.9	6.3
Western Europe	154.3	161.5	166.6	16.1
Central/Eastern Europe	95	103.9	111.6	10.8
Southern/Mediterranean Europe	173.5	187	191.1	18.5
Of which EU-27	371.0	390.9	400.2	38.7
Asia and the Pacific	205.1	218.2	233.6	22.6
Americas	111.5	115.8	122.8	11.9
Africa	70	77.3	84.6	8.2
Middle East	11.6	11.7	12.1	1.2
World	949	995	1,035	100

Source: UNWTO (2013), Tourism Highlights
* provisional figure or data

Figure 17 shows actual and forecast international tourist arrivals by region to 2030. UNWTO predict that the total number of arrivals will reach 1.8 billion in 2030, Europe remaining the most popular destination for international tourists. The data also shows that Europe will continue to grow at a steady pace between 2010 and 2030 (average annual growth of 2.3%), whereas Africa (5%), the Middle East (4.6%) and Asia and the Pacific (4.9%) will be growing faster than they have so far.

Europe is also the most important destination in terms of business travel. Figure 18 shows that Western Europe accounts for the highest proportion of such arrivals, followed by Asia Pacific. The Middle East and Africa and Eastern Europe rank third and fourth with similar market shares. The figure also shows estimated growth for global business arrivals between 2009 and 2017. According to Euromonitor, maximum growth in business trips was experienced in 2010, followed by stable growth at 4% in subsequent years.

Figure 17: Actual trend and forecast 1950-2030 for international tourist arrivals, millions



Source: UNWTO (2013)

Figure 18: Global business arrivals growth and by region

Source: Euromonitor International (2013)

3.7 Sustainable tourism

3.7.1 Sustainable tourism market

The UNWTO defines sustainable tourism as: "*tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities*" [UNWTO and UNEP (2005)].

Although it is generally accepted that the market and demand for sustainable tourism is growing, no official statistics are available to document this shift, particularly regarding the market of sustainable accommodation businesses. The Centre of Responsible Travel (CREST) produces an annual literature review capturing all available information in this sector. The principal sources of information are market studies and surveys carried out by organisations within the travel sector. The latest report was published in early 2014 [CREST (2014)].

According to a Trip Advisor survey, 79% of travellers globally "*think that it's important that accommodation providers have eco-friendly practices*" [Trip Advisor (2013)]. 91% of accommodation providers agreed that it is important to be eco-friendly but only 77% responded they have environmentally friendly policies in place. A Conde Nast Traveler survey in 2011 found that 93% of respondents thought that travel companies should be responsible for protecting the environment and 58% said that their hotel choice was influenced by the establishment's support to the local community [PR Newswire (2011)].

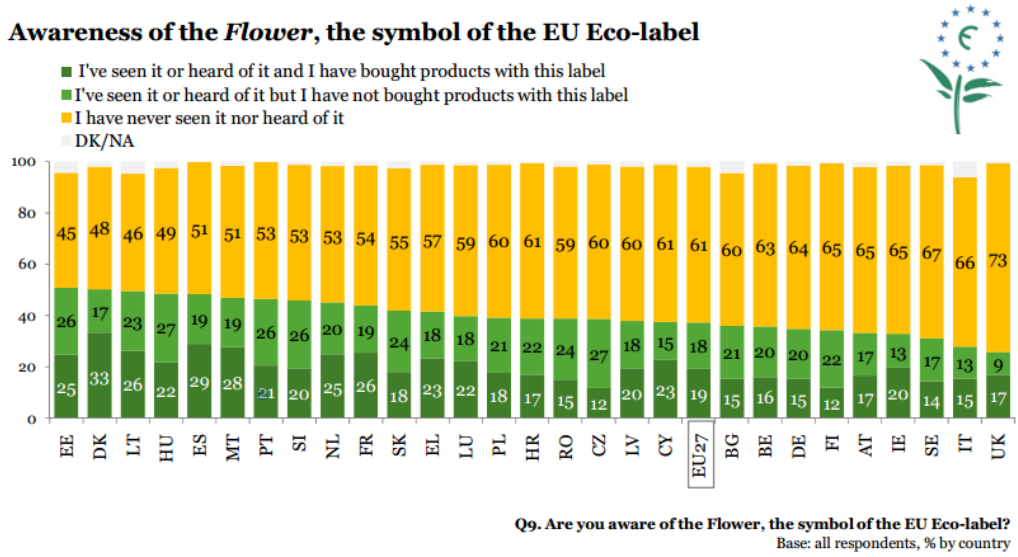
In terms of business travel, 47% of travellers prefer staying in a hotel with environmental certification, according to Timetric's Global Business Traveler Survey 2013 [CREST (2014)]. In addition, a report by Deloitte reported that 95% of business travellers surveyed responded that the hotel industry should be undertaking green initiatives and that sustainability will become a core issue in the hospitality industry in 2015 [Deloitte (2010)].

3.7.2 Attitudes of EU citizens towards tourism and the environment

The Public Opinion Analysis sector of the European Commission produces periodic studies to monitor the public opinion of European citizens addressing a number of topics. These can be in-depth thematic studies carried out for various services of the European Commission and integrated in Standard Eurobarometer's polling waves. In other cases, these are conducted as *ad hoc* thematic telephone interviews on the request of any service of the European Commission. No such studies are available on the specific topic of sustainable tourism; however, useful information can be gathered from other reports on attitudes towards sustainable consumption, the environment and tourism.

In a 2009 study looking at Europeans' attitudes towards the issue of sustainable consumption and production, survey respondents were asked whether they had ever heard about the EU Ecolabel or seen the Ecolabel flower. Throughout the EU-27, only 37% of respondents knew about the EU Ecolabel; 19% had also bought products with this label (Figure 19). Although the figure is low, it shows a significant improvement since 2006 when only 11% had heard of the Ecolabel [European Commission (2013)]. More recent data are not available.

Figure 19: Awareness of the Ecolabel in Europe



Source: European Commission (2009)

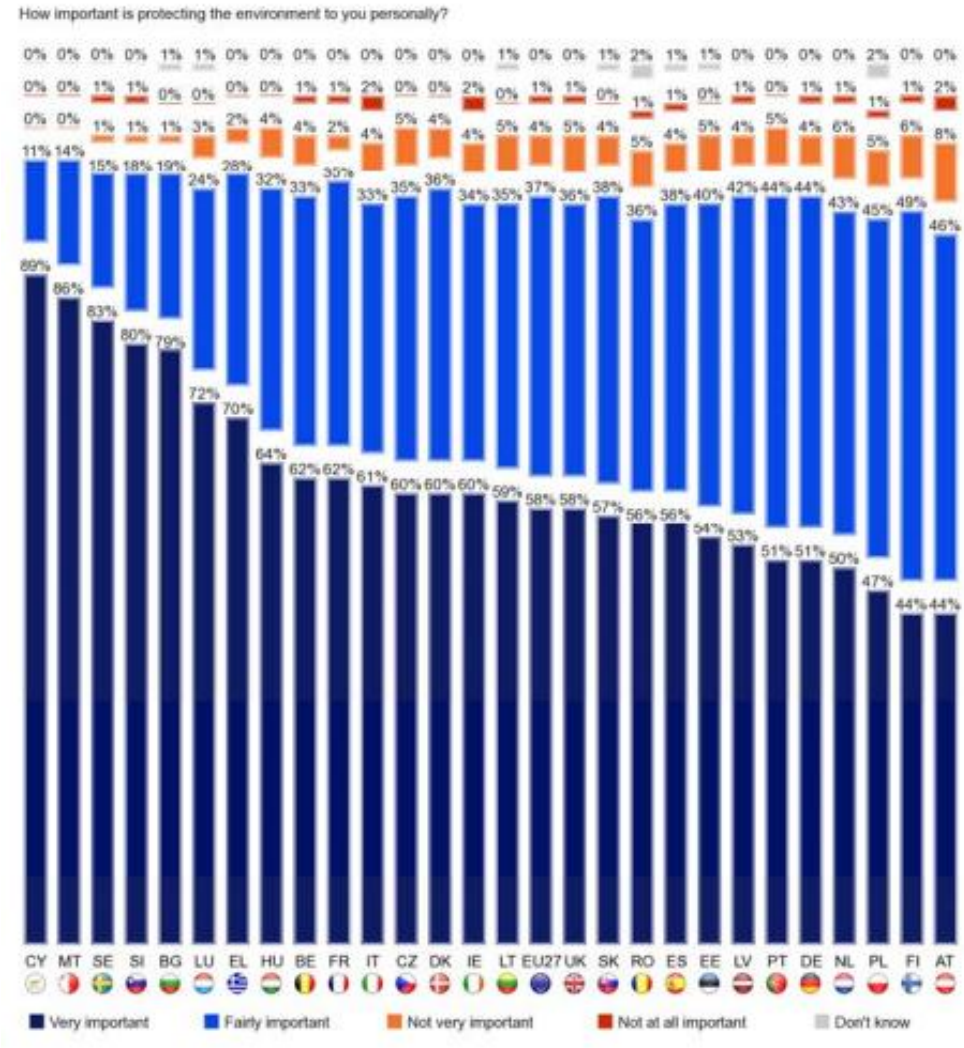
The survey results show there is a large variation between different Member States. According to the data, the countries in which there is highest awareness of the EU Ecolabel are Estonia (51%) and Denmark (50%), Denmark also being the country where the highest percentage of people bought an Ecolabelled product. The UK (26%) and Italy (28%) are the countries where the EU Ecolabel is least well known, whereas Ecolabelled products have been least successful in the Czech Republic and Finland.

Ecolabelling Denmark collects information on the awareness of the EU Ecolabel on an annual basis. According to these statistics, the percentage of people aware of the EU Ecolabel decreased from 36% in 2009 to 15% in 2010. One explanation for this could be the change of the Ecolabel logo in 2010. In 2012, it is reported that 18% of Danish people surveyed were aware of the EU Ecolabel [Ecolabelling Denmark (n.d.)].

The survey also showed that awareness of the Ecolabel was higher in people who were also aware about a product's environmental impact. The groups of respondent who were most likely to have bought Ecolabelled products were 25-54 year-olds and those with the highest level of education.

A more recent survey published in 2011 focussed on the attitude of EU citizens towards the environment. 95% of respondents said that the environment was personally important to them. This was unchanged since the previous survey in 2007 (-1%) and relatively constant across all European countries (Figure 20). 100% of respondents in Malta and Cyprus believed that this was true; the country with the lowest percentage was Austria (90%). In addition, 87% of respondents thought that they could personally play a role in protecting the environment. When asked to describe what kind of environmental activities they carry out, 17% of respondents said they bought environmentally-friendly products marked with an environmental label; this was unchanged from 2007 results. However, the most popular actions were recycling of waste (66%) and reduction in energy consumption (53%). These are encouraging results with regard to the Tourist Accommodation Ecolabel as it shows the customer's willingness to engage in such activities for the environment's benefit [European Commission (2011)].

Figure 20: The importance of protecting the environment for European citizens

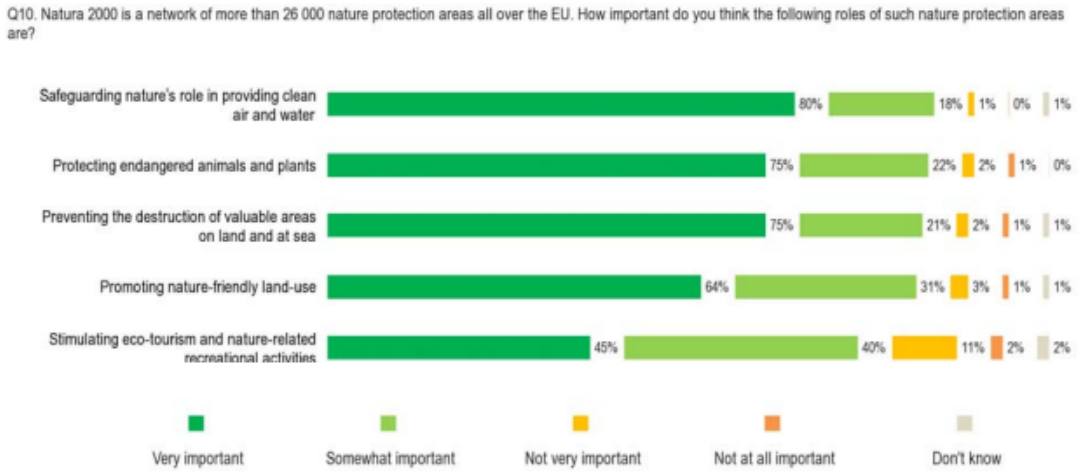


Source: European Commission (2011)

Europeans also believe that the loss of biodiversity in their country is a problem; 86% of Europeans believed this was true in 2013, compared to 84% in 2010 and 88% in 2007. However, those who thought it was a serious problem decreased from 43% in 2007 to 35%

in 2013. In 2013, 94% of respondents thought loss of biodiversity was a problem at a global level. In this context, 85% of respondents thought that nature protection (through Natura 2000) was important in stimulating eco-tourism and nature-related recreational activities (Figure 21) [European Commission (2013b)].

Figure 21: The importance of nature protection areas for European citizens (EU-27)

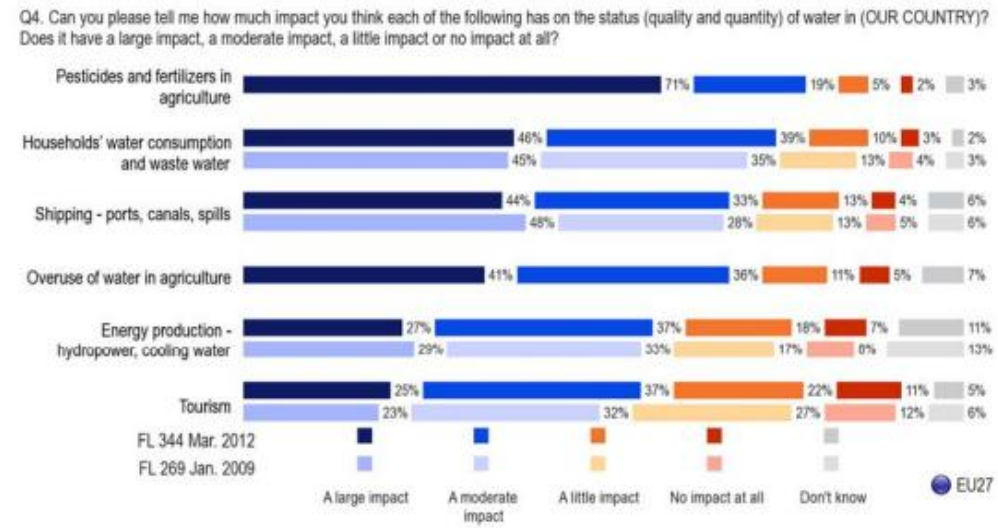


Source: European Commission (2013b)

With regard to water, 25% of Europeans thought that tourism has a large impact on the quality and quantity of water in their country in 2012; an increase from 23% in 2009. Overall, 84% of people thought that tourism had some impact on the status of water. The most important impacts with regard to the status of water were thought to be pesticides and fertiliser use in agriculture and households' water consumption [European Commission (2012)].

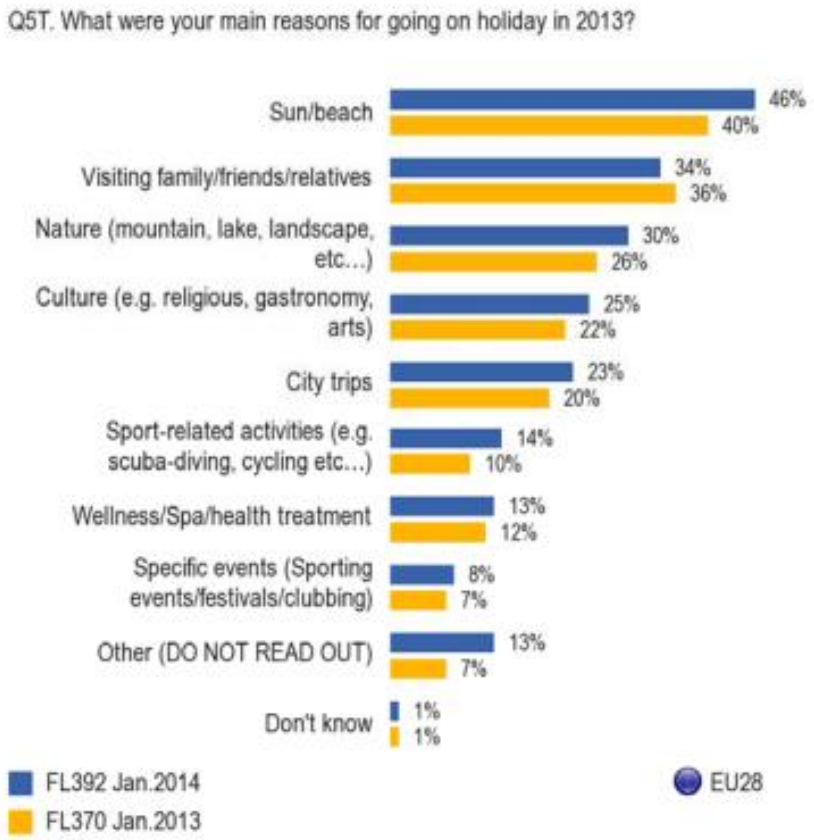
Finally, two of the most popular reasons for going on holiday in 2013 were going to the beach or a sunny destination (46%) and nature (36%). These were up from 40% and 36% respectively in 2012 (Figure 23). These types of holidays were preferred to city breaks 23%, although the data refer to holidays longer than four days and therefore may not capture a large proportion of such trips. Furthermore, tourists were asked what the main reasons for returning to a holiday destination were. The natural features of the destination were the main reason for doing so (46%, up from 44% in the previous year). The quality of accommodation (33%) and cost (26%) were less important in making such decision [European Commission (2014)].

Figure 22: The importance of activities to the quality and quantity of water according to Europeans



Source: European Commission (2012)

Figure 23: The main reasons for going on holiday in 2013



Base: 50% from the total number of respondents – EU28
(Those who went on a personal travel for a minimum of four consecutive nights during 2013)
Source: European Commission (2014)

3.8 Sustainable hotel services

As mentioned above, the only available statistics regarding sustainable travel are based on consumer surveys. Little information is available about the uptake of sustainable practices within industry. This section looks at the environmental policies and initiatives undertaken by the top ten hotel chains in Europe, as shown in Table 11. These are taken as market leaders, setting market trends within the accommodation sector.

A desktop review of the sustainability commitments of Europe's largest hotel businesses was undertaken. A number of common initiatives and targets were identified. In most cases, the core targets for these hotels focussed on decreasing their carbon footprints through a reduction in energy and water consumption and waste generation. In addition, obtaining environmental certification and the use of Eco-labelled products are popular amongst these businesses. A summary of these initiatives is shown below.

3.8.1 Carbon footprint and emission measurements

Measurement of resource consumption and emissions is common within this group of hotels. The majority have systems in place to measure the consumption of water and energy and the generation of waste. These are important tools in monitoring performance against targets. For example, Accor reported that 96% of their hotels monitored their water consumption and 93% their energy consumption on a monthly basis [Edie (2013)]. In many cases the full carbon footprint of the hotels is measured and targets to reduce the overall footprint have been set.

A common method to measure the carbon footprint of hotels was introduced in 2012 by the International Tourism Partnership (ITP) and the World Travel and Tourism Council (WTTC). This

was developed by KPMG with the help of 23 global leading hotel companies. The Hotel Carbon Measurement Initiative (HCMI) offers a common methodology for calculating carbon footprints specifically for hotels, and therefore enables comparisons between different hotels and chains and results in aligned carbon reporting within the sector. The methodology is publicly available through the ITP and WTTC. In the top ten European chains, the following are using this tool: Accor, Carlson Rezidor Hotel, Hilton Worldwide, InterContinental Hotels Group, Meliá Hotels International, NH Hoteles, Premier Inn - Whitbread Group, and TUI AG [WTTC (2013)].

Intercontinental Hotels Group (IHG) and Hilton Worldwide have also created online tools for hotels to measure their carbon footprint. Both of these use the HCMI methodology:

- IHG, which includes hotel chains such as Holiday Inn, is encouraging its hotels to become more sustainable through an online sustainability management system named IHG "Green Engage". The aim of this system is to provide hotels with the means to become more resource efficient and therefore save money [IHG (2013a)]. The system allows for hotels to input their performance data, which is then benchmarked so that the data can be compared to the performance of other hotels within the group. IHG Green Engage then provides hotels with solutions to reduce their impact, relative to the hotel's climatic location. A hotel's performance is measured by its overall carbon footprint and data collection focuses on energy, water and waste [IHG (2013b)].
- Hilton Worldwide developed a measurement tool named "LightStay". The tool was developed in 2002 and now all hotels within the chain are required to use this to measure their environmental performance. The tool measures over 200 indicators such as energy, water, carbon, paper product usage, waste, chemical storage, air quality and transportation. Training is offered to staff to help them make use of the tool. The system also includes social media functionality to share best practice amongst hotels [Hilton Worldwide (n.d.)].

3.8.2 Energy reduction

The reduction of energy consumption is a key concern for all the hotel groups examined. Many have set targets to encourage hotels to decrease their energy usage. These chains use a variety of methods to achieve these targets, and methods which mirror the EU Ecolabel criteria for tourist accommodation services. For example, Accor, Carlson Rezidor Hotel Group, Group du Louvre and NH Hoteles have all reported the use of energy efficient lighting. Other initiatives include using energy efficient appliances, building design and improvements and investing in energy saving technologies. Investments in the use of solar panels and other renewable energy sources, and in combined heat and power generation units, have also been made.

3.8.3 Water reduction

Once again, the consumption of water is a principal issue raised by the majority of hotels. The most common reduction strategy is to use water-saving devices for showers and taps. NH Hoteles also looked at water consumption at its swimming pools, have been re-using water for irrigation and recycling grey water [NH Hotel Group (2013)]. The Carlson Rezidor Hotel Group has introduced water-saving toilets in over 70% of its hotels [The Rezidor Hotel Group (2013)], and Hilton Worldwide has developed partnerships that offer laundry technologies that use less water. Furthermore, Hilton has identified new towels which are lighter and more resistant, meaning more can be washed at one time and they last longer than conventional products [Hilton Worldwide (2013)].

3.8.4 Waste reduction

There is less concentration on reduction in waste generation and increased recycling than on water and energy savings. Initiatives focus mainly on increasing recycling levels within the overall hotel facility and moving away from landfill. For example, both IHG and NH Hoteles are using biodegradable packaging [IHG (n.d.), NH Hotel Group (2013)]. In addition, NH has invested in oil and cork recycling projects [NH Hotel Group (2013)]. Within the Accor group, 79% of hotels recycle waste, including batteries, and fluorescent lamps and tubes [Accor (n.d)]. Both Hilton Worldwide and Whitbread Hotels & Restaurants have a target of zero waste to landfill.

3.8.5 Environmental certification

A number of hotel chains are pursuing environmental certification of their hotels to recognise their work within this field. Many hotel groups have reported the intention to increase the number of certified hotels as a means of independently guaranteeing environmental practices. The chains have been using different schemes to gain accreditation, often local/national labels which are well known within the specific countries. Clearly certification is an increasing trend; however, the EU Ecolabel scheme has only been used by one of the Hotel chains looked at: the Best Western Hotels in France and Austria.

Interestingly, the Carlson Rezidor Hotel Group, which includes hotel brands such as Radisson, has set a target to achieve environmental/sustainability certification for 100% of their hotels by 2015. In countries such as Belgium, Finland, France and Ireland this has already been achieved. Several different Ecolabels/sustainability labels are being used including: the Austrian Ecolabel, the Green Key scheme, the Green Tourism Business Scheme, and the Nordic Swan Ecolabel [The Rezidor Hotel Group (2013)].

The Best Western group has introduced a 'green' icon on the Best Western and related website for hotels with at least one national or international environmental label [Best Western (n.d.)]. For example, Best Western France has been working towards achieving the EU Ecolabel for its hotels since 2006. So far, around 50 hotels have achieved the certificate [Afnor (2013)]. In Italy, the environmental performance of all Best Western hotels was measured according to the LifeGate Stay for the Planet Scheme. The Italian website allows customers to search for hotels on the basis of this performance [Best Western Italia (n.d.)]. Other countries are running similar schemes; for example, the Green Tourism Business scheme is used by Best Western in the UK and the Nordic Swan in Best Western hotels in Norway and Sweden [Best Western (n.d.)].

The InterContinental Hotel Group (IHG) has launched a partnership with Green Globe and Green Key Global for third–party certification. A streamlined application process has been created for hotels participating in the IHG Green Engage program. In 2013, 124 hotels in the USA and Canada were registered with Green Key Global, and 22 hotels around the world were certified with Green Globe [IHG (2013b)].

The TUI Group aims to show its environmental commitment by adjusting their environmental management systems to meet internationally recognised standards, such as ISO 14001. Amongst the eco-labels and standards which have been used so far are ISO 14001, EMAS, Green Star, Travelife, Green Key, Austrian Ecolabel and Earth Check [TUI (2014)]. TUI Hotels and Resort has also set up an internal environmental certification for hotels which meet certain standards and are positioned among the 100 best performing hotels within the group [EcoResort (2014)].

Finally, Meliá Hotels have also been certifying an increasing number of hotels to confer greater credibility to the work carried out by the hotels. In its annual sustainability report, it was stated that the group gives priority to specific tourism industry certificates that cover environmental issues as well as the socio-economic and cultural environment of the hotel's

location. The labels which are most common are Biosphere Responsible Hotels and Earth Check [Meliá Hotels (2013)].

3.8.6 Use of eco-labelled products

The use of ecolabelled products has been introduced in business' environmental policies and initiatives both for environmental and health reasons. These are principally used for cleaning products. For example, Accor has a target for 85% of its hotels to use eco-labelled products including cleaning products, paints and floor coverings, to ensure healthy interiors for customers. In 2012, 89% of hotels used such products. In addition, as part of a target to encourage eco-design, it is reported that 20% of hotels had eco-labelled bathroom products [Accor (n.d.a)] Group du Louvre is testing distributors of eco-labelled soaps and Concorde Hotels and Resorts, which are part of the group, is committed to encouraging the use of eco-labelled cleaning products [Concorde Hotels & Resorts (n.d.)].

3.9 European policy and initiatives on sustainable tourism

The growth of sustainable and environmentally responsible tourism has also been reflected by an increasing EU policy focus in this area. Subjects identified as priority action areas in the EU 2010 Communication on Tourism [European Commission (2010)] include the promotion and continuing development of sustainable, responsible and high quality tourism. This develops the themes outlined in the European Commission's 2007 Agenda for Sustainable & Competitive European Tourism [European Commission (2007)] which highlights the approach required to develop a sustainable and competitive European Tourism sector.

Several of the 'Actions' presented in the 2010 communication document relate directly to promoting sustainability in the tourism sector as the Commission acknowledges that sector's competitiveness is closely linked to its sustainability. In this context, sustainability is seen as: "*the responsible use of natural resources, taking account of the environmental impact of activities (production of waste, pressure on water, land and biodiversity, etc.), the use of 'clean' energy, protection of the heritage and preservation of the natural and cultural integrity of destinations, the quality and sustainability of jobs created, local economic fallout or customer care*". Clearly, these are in line with the principles and aims of the Ecolabel for tourist accommodation services. In fact, this is named as one of the tools introduced to facilitate sound environmental management of these businesses [European Commission (2010)].

Table 13: European actions related to development of sustainable tourism

No.	Action
11	Develop, on the basis of NECSTouR or EDEN, a system of indicators for the sustainable management of destinations. The Commission will use this to develop a label for promoting tourist destinations.
14	Help European tourism industry identify risks linked to climate change in order to avoid loss-making investments, and explore opportunities for developing and supplying alternative tourism services.
15	Propose a charter for sustainable and responsible tourism and establish a European prize for tourism businesses and destinations respecting the values set out in the charter.
16	Propose a strategy for sustainable coastal and marine tourism.
17	Establish or strengthen cooperation between the European Union and the main emerging countries (China, Russia, India, Brazil) and Mediterranean countries to

	promote sustainable and responsible tourism development models and the exchange of best practice.

Source: European Commission (2010)

The actions shown in Table 13 relate to the promotion and enhancement of sustainable tourism. In addition, the Commission aims to consolidate Europe's reputation as a sustainable and high-quality tourist destination.

So far, a system of indicators for the sustainable management of destinations and a charter for sustainable and responsible tourism is being created (Action 11). The European Tourism Indicator System toolkit for sustainable destinations was published in February 2013 by DG Enterprise and Industry [DG Enterprise and Industry (2013)]. The European Tourism Indicator System is specifically intended for tourism destinations. The key point of this indicator system is that intelligent decisions need to be based on useful information. European tourism data focus on a limited set of statistics such as visitor arrival numbers and satisfaction ratings; however, little information is gathered on issues relating to sustainability, such as water consumption. The toolkit aims to aid the collection of such data and provide an accurate picture to help in the decision making process.

The toolkit will be used on a voluntary basis and is designed to be owned and led by the destination itself. It was developed by building on previous indicator system initiatives and refined through feedback collected from field testing around Europe. The first pilot phase started in July 2013 and is due to end April 2014; this involved testing the toolkit in 100 tourism destinations. A second pilot phase is due to start after that.
The indicator system is made up of a set of 27 core and 40 optional indicators, a toolkit to provide guidance on implementation, and a dataset to collate data received from stakeholders. Indicators are divided in four themes, one of these relates directly to environmental impact. These indicators focus on reducing transport impact, climate change, solid waste management, sewage treatment, water management, energy usage, landscape and biodiversity protection, light and noise management, and bathing water quality.

The European Charter for Sustainable and Responsible Tourism is currently under development. The first draft was subjected by a public consultation and a final draft was due to be published in 2013. The charter seeks to become a common point of reference to all European stakeholders and aims to encourage the development of responsible and sustainable tourism practices [European Commission (n.d.)].

DG Enterprise and Industry launched a consultation in December 2012 to support the European Tourism of the Future. The aims of this consultation are to better identify the future challenges of the European tourism industry and to help revise, if necessary, the 2010 communication mentioned above [European Commission (2013c)].

Other EU policies and programmes impacting tourism include:

- European Regional Development Fund (ERDF) – supporting more sustainable patterns of tourism to enhance cultural and natural heritage, etc. Environment and transport are also financed by the Cohesion Fund.
- European Social Fund (ESF) – co-financing projects to enhance productivity and quality of employment and services in the tourism sector through education and training. Targeted training & small start-up premiums for tourism micro-enterprises.
- European Destinations of Excellence EDEN (launched in 2006) – aiming to promote sustainable tourism development models across the EU by selecting a destination of excellence for each participating country [European Commission (2014a)].

- Network of European Region for a Sustainable and Competitive Tourism (NECSTouR) [Information available at: www.necstour.eu], launched 2007 – A network gathering 28 Tourism Regional Authorities associated to 30 representatives of the academic and business sectors with the aim of increasing knowledge of sustainable practices and policies through knowledge sharing of members.

3.10 Summary of key market aspects relevant for the criteria revision

- Travel and tourism is a growing sector worldwide, and is one of the largest sectors globally. The sector has experienced growth despite the economic downturn over the recent years, and remains a critical sector for economic development and for sustaining employment. In fact, the tourism industry is responsible for 1 in 11 jobs in the world.
- Tourism is the third largest economic activity in the EU, following the construction and demolition sector. The tourism industry in the EU-28 employed directly over 3 million people by 300,000 enterprises, generating 380 billion in turnover in 2010.
- International arrivals in Europe have been growing since 2009, following a dip due to the economic recession. Arrivals have grown above pre-crisis levels and are predicted to grow in the future. According to UNWTO European arrivals (including non EU-28 countries) will increase from 475 million in 2010 to 620 million in 2020.
- France, Spain, Italy, Germany and the UK were among the top ten countries by tourist arrivals in 2012.
- The EU-28 accommodation sector (defined by NACE 2 codes 55.1, 55.2, 55.3, see section 3.4) employs over 2 million people through around 250,000 enterprises and generated €136 million in turnover in 2010. The market is dominated by hotels, whereas campsites only account for a small proportion of the sector.
- Four EU-28 countries are responsible for more than 50% of both the turnover and the number of people employed within the accommodation sector. These are Germany, France, the UK and Italy. Spain is also significant in the sector.
- Turnover of tourism establishments dropped between 2008 and 2009 because of the global economic crisis. Turnover has been increasing since and a full recovery to 2008 levels was achieved by 2011. Overall, a 4% increase in European turnover was reported from 2008 to 2011.
- The trend reported for number of tourist nights followed the same pattern as that of turnover. However, the overall increase in number of nights grew faster than turnover suggesting customers are moving towards cheaper or alternative accommodation services.
- Statistics show that the average holiday length decreased between 2010 and 2011, but the number of trips made has increased, indicating a shift towards shorter holidays.
- Business trips have been affected by the economic crisis more significantly compared to holiday trips. These experienced a 13% reduction between 2008 and 2011, with the number of nights and length of trips also decreasing.
- The tourism industry is characterised by the high number of SMEs present in the market. These accounted for 20% of the European tourist labour force and for 30% of the turnover in the sector.

- It is generally accepted that the market and demand for sustainable tourism is growing; however, no official statistics are available to document this shift, particularly regarding the market share of sustainable accommodation businesses. Data available is mainly related to consumer surveys.
- A Trip Advisor survey found that 79% of travellers globally "think that it's important that accommodation providers have eco-friendly practices". 91% of accommodation providers agreed that it is important to be eco-friendly but only 77% responded they have environmentally friendly policies in place. As reported by Deloitte, 95% of business travellers surveyed responded that the hotel industry should be undertaking green initiatives and that sustainability will become a core issue in the hospitality industry in 2015.
- Public opinion polls in the EU found that, in 2009, 61% of Europeans had never heard of or seen the EU Ecolabel. The groups of respondents who were most likely to have bought Ecolabelled products were 25-54 year-olds and those with the highest level of education. 95% of people interviewed in 2011 said that the environment was personally important to them. With regard to water, 25% of Europeans in 2012 thought that tourism has a large impact on the quality and quantity of water in their country.
- Two of the most popular reasons for going on holiday in 2013 were going to the beach or a sunny destination (46%) and nature (36%). These were up from 40% and 36% respectively in 2012.
- The ten major European hotel chains have all shown a commitment towards reducing their environmental impact. This shows that environmental awareness is becoming an important factor within the accommodation industry. Many of the actions taken by these enterprises match the EU-Ecolabel criteria for tourist accommodation services.
- Examples include the use of energy-efficient light bulbs and appliances, investments in renewable energy technologies, introduction of water-saving devices, increased recycling of waste and the use of eco-labelled products.
- Finally, many of these companies are working towards achieving third-party certification to recognise their efforts to reduce their environmental impact. The most notable example is the Carlson Rezidor Hotel Group that is aiming to gain accreditation for 100% of its hotels by 2015. A number of environmental labels specific to the tourism sector have been used. However, Best Western France and Austria are the only ones among the leading hotel chains choosing to use the EU Ecolabel.

4 Technical analysis (Task 3)

Section summary:

The main requirement of the EU Ecolabel is that criteria should be based on scientific evidence and should focus on the most significant environmental impacts during the whole life cycle of products. This section identifies these significant impacts through an analysis of various sources:

A. A report has recently been published by the IPTS on best environmental management practice (BEMP) in the tourism sector [JRC IPTS (2013)], which has been compared against the current EU Ecolabel criteria. This report is intended for use by all stakeholders in the tourism sector, as a source of reliable information to help reduce environmental impacts and encourage continuous improvement. The BEMP report has identified the most important environmental aspects for tourist accommodation as:

1. Accommodation: Water consumption.
2. Accommodation: Waste generation.
3. Accommodation: Energy consumption.
4. Kitchens: Food sourcing, organic waste generation, water and energy consumption.
5. Campsites: Guest education, outdoor area management and energy and water consumption.

Overall, the EU Ecolabel current focuses on these aspects and no new environmental impacts have been identified. However, water management of swimming pools is lacking in the current EU Ecolabel.

B. A review of current LCA literature was also undertaken. The main environmental aspects identified in the LCA review match with the hot spots described in the best environmental management practice (BEMP) report, which highlights electricity consumption during the operating phase as the major environmental impact of tourist accommodation. However, it should be noted that many of the LCA case studies placed a high emphasis on the impacts of transport and use of other services or suppliers (e.g. catering and laundry). The BEMP document is being used as a reference to update the criteria. Nevertheless all of the aspects identified in the LCA review will be considered throughout the criteria update, and will be outlined in the Technical Report.

C. There are a number of alternative eco-labels (i.e. Type I labels or equivalent) which provide certification for tourist accommodation. It is important to compare these labels to ensure there is a degree of synchronicity; in particular to ensure that the EU Ecolabel focuses on relevant key environmental aspects (including: energy, water, waste, chemical use etc.) that have also been identified as significant in other eco-labels. Major differences between the EU Ecolabel and other Type I eco-labels include:

- The inclusion of social and quality aspects
- Swimming pool criterion focusing on water reduction.
- Offering of 'green event packages' and criterion for 'green conference paper etc.'
- Encouragement of GHG offsetting, green construction of buildings
- Ensuring staff are aware of the label (through training)
- Mandatory limit values for energy, water and waste.

D. The potential for social and quality updates within the EU Ecolabel for tourist accommodation have also been considered. Stakeholder feedback and evidence from alternative eco-labels has been reviewed to determine how these issues can be further considered.

4.1 Introduction and aims

The main requirement of the EU Ecolabel is that criteria should be based on scientific evidence and should focus on the most significant environmental impacts during the whole life cycle of products. According to the Communication 'Building the Single Market for Green Products' from the EU Commission (COM (2013) 196), better information on the environmental performance of products should be facilitated in general.

The purpose of this chapter is to respond to this requirement by using the best available scientific evidence to identify the key environmental impacts of tourist accommodation – these are the impacts which the EU Ecolabel revision for tourist accommodation must consider.

4.2 Environmental impacts of tourist accommodation, identified in best environmental management practice (BEMP)

The primary aim of the EU Ecolabel for tourist accommodation is to set limits on the main environmental impacts from the three phases of the life cycle of tourist accommodation service: the purchases made in order to provide the service, the use of the service facilities and the management of the waste produced as a result of the provision of the service.

It is therefore important that the EU Ecolabel criteria reflect the main environmental impacts of tourist accommodation. A report has recently been published by the IPTS on best environmental management practice (BEMP) in the tourism sector [JRC IPTS (2013)]. This report is intended for use by all stakeholders in the tourism sector, as a source of reliable information to help reduce environmental impacts and encourage continuous improvement. This report has therefore been used to check that the current EU Ecolabel criteria for tourist accommodation meet best practice. Annex I provides further detail on how the current EU Ecolabel criterion maps against BEMP.

The BEMP report has identified the most important environmental aspects for tourist accommodation as:

6. Accommodation: Water consumption.
7. Accommodation: Waste generation.
8. Accommodation: Energy consumption.
9. Kitchens: Food sourcing, organic waste generation, water and energy consumption.
10. Campsites: Guest education, outdoor area management and energy and water consumption.

Each of these aspects is outlined in further detail below.

4.2.1 Accommodation: Water consumption

Water use in tourist accommodation has been identified as a significant environmental aspect. It is estimated that water can account for approximately 10% of utility bills in hotels, but this can vary considerably across different types of accommodation and is dependent on the facilities offered (for example a swimming pool or laundry facilities). This is shown in Table 14 below.

Table 14: Water use across different accommodation types*

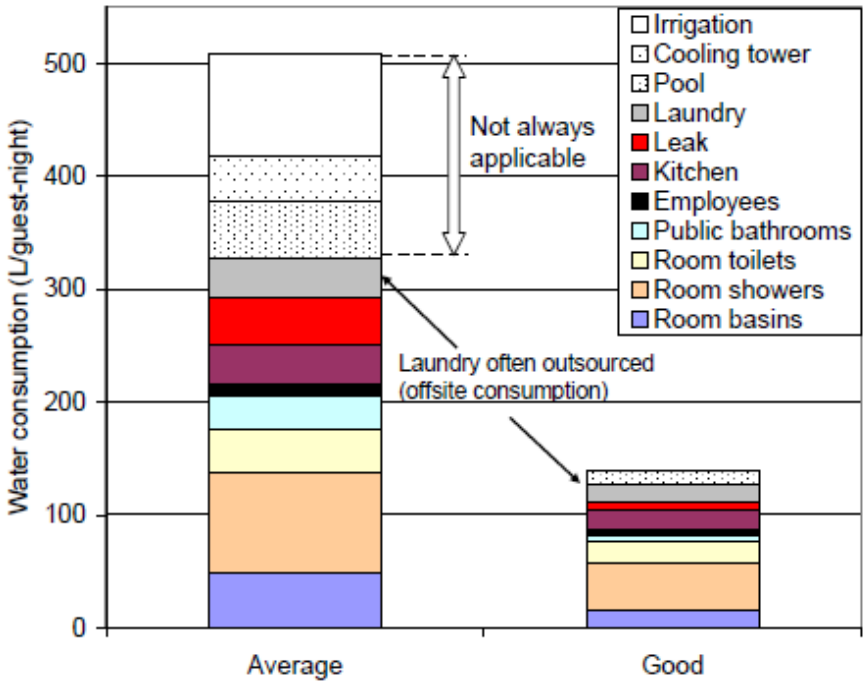
Accommodation type	Specific water consumption (l/guest night)
Hotel	312

Holiday house	273
Bed and breakfast	226
Campsite	148
Group accommodation	115

*based on a sample of 375 enterprises in Austria and Germany
Source: Ecotrans (2006) Environmental initiatives by European tourism business; cited in JRC IPTS (2013) Reference Document on Best Environmental Management Practice in the Tourism Sector

There is a real opportunity for tourist accommodations to better manage water consumption, reducing their environmental burden and potential high cost of water use. Table 15 provides a modelled example of how good management can reduce water use in a hotel by over 50%. Key areas where water use can be significantly reduced include: irrigation, the swimming pool, laundry, the hotel kitchen and guest rooms (toilets, showers and basins). In addition, the graph shows that a significant reduction in water use is possible by reducing water leakages on site. Importantly, a large proportion of this saving can be achieved through low-cost, simple mechanisms, such as installation of efficient water fittings [JRC IPTS (2013), p.207].

Table 15: Modelled specific water consumption per guest-night in a 120 bed hotel implementing average and good management across water using processes



NB: This figure assumes 80% room occupancy (20% double occupancy). Based on average and good performance data presented in JRC IPTS (2013), BEMP
Source: JRC IPTS (2013), Reference Document on Best Environmental Management Practice in the Tourism Sector

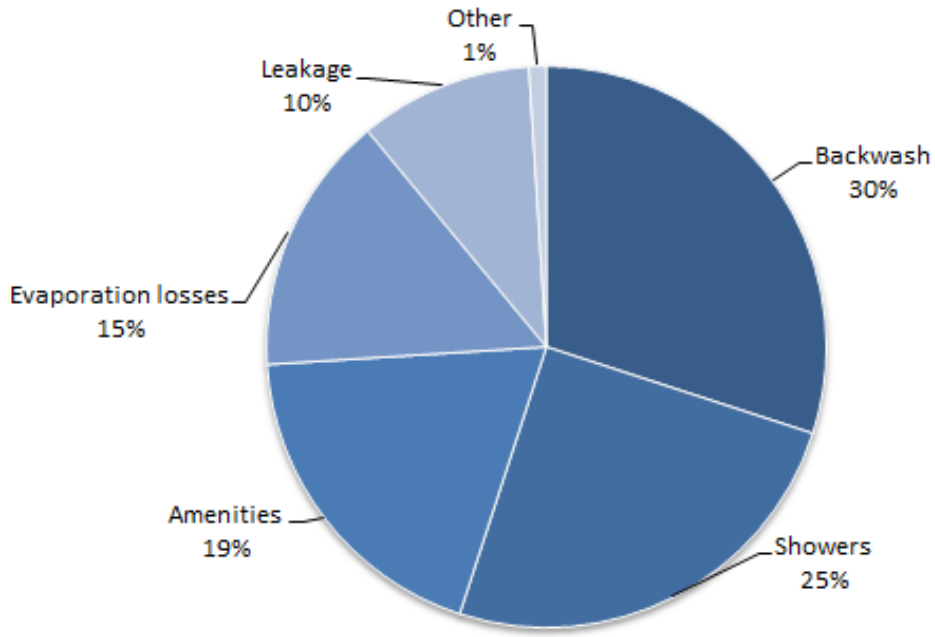
To achieve these water efficiency savings, a number of best environmental management practices are suggested. These can be summarised as [JRC IPTS (2013), p.208-209]:

- Maintenance of water-using devices is important – this can prevent or detect any leaks.
- Installation of efficient water fittings (for example those which have been EU Ecolabelled or awarded other Type-I environment labels) is beneficial. This may include, for example, low flow toilets, sensors to regulate the use of water, or timers to restrict uncesessary water use.
- Efficient housekeeping operations, such as implimentation of a bedclothes and towel re-use scheme or employing water saving cleaning methods (such as turing off taps when cleaning or only flushing toilets as required) can reduce water usage.

- The laundry process should be optimised to minimise the number of washes - green procurement of efficient washing machines can help to reduce both water and energy use.
- The use of grey water or recycled water should be encouraged
- Irrigation should be optimised. This may include planting only indigenous species, or watering plants at the best time of day to minimise evaporation losses.
- Monitoring water use through meters (and, where possible, sub-meters) can help tourist accommodation sites better manage and find areas to reduce water use.

In addition, a number of tourist accommodation sites operate swimming pools - there is often significant scope to reduce water usage here. Figure 24 provides a breakdown of water consumption in a typical swimming pool. Backwashing accounts for a significant 30% of this. Overall, it is estimated that swimming pools can increase water consumption by an average of 60 litres per guest-night across hotels and camping sites [Ecotrans (2006)].

Figure 24: Breakdown of water consumption across processes and areas in a typical community pool



Source: Hazell at al. (2006) Best Practice Profile for Public Swimming Pools; cited in JRC IPTS (2013), Reference Document on Best Environmental Management Practice in the Tourism Sector

Effective management of swimming pools can help to drastically reduce water use. BEMP for swimming pools includes [JRC IPTS (2013), p.297]:

- Monitoring water use in swimming pools to help identify where this can be reduced.
- Ensuring backwashing frequency and timings are optimised, and/or recycling or re-using backwashing water.
- Fitting swimming pools with covers to minimise evaporation.

Swimming pools can also consume a lot of energy, and may use a lot of detergents.

The table below outlines the best practice measures (from BEMP guidance) for operation of swimming pools. This is compared to current EU Ecolabel criteria to identify where gaps may exist between the two.

Table 16: Best practice measures for operating swimming pools, compared to current EU Ecolabel criteria

Theme	Best practice measures	Current EU Ecolabel criteria
Energy	Pool heating requirements can be minimised by: • Avoiding excessive water temperature • Correct use of pool cover • Demand-control of water circulation • Solar or heat-pump water heating • Controlled ventilation with heat recovery.	The best practice measures are broadly considered in the following EU Ecolabel criteria: • Swimming pool heating with renewable energy sources (up to 1.5 points) Energy used to heat swimming pool water shall come from renewable energy sources. At least 50%: 1 point, 100%: 1.5 points. • Swimming pool cover (1 point) At night or when the filled swimming pool is not used for more than a day, it shall be covered to prevent the cooling of the water in the pool and to reduce evaporation.
Disinfection	Best practice measures for reducing disinfectant use include: • Natural pools • Require users to pass through a foot bath • Sweep debris from surrounding area • Optimise chlorine dosing • Electrolysis, ozonation or UV	The best practice measures are broadly considered in the following EU Ecolabel criteria: • Swimming pools: Dosage of disinfectants (1 point) or natural/ecological swimming pools (1 point) The swimming pool shall have an automatic dosage system that uses the minimum amount of disinfectant for the appropriate hygienic result (1 point). Or The swimming pool shall be of the ecological/natural type with only natural elements guaranteeing for the hygiene and safety of the bathers (1 point).
Water	Best practice for minimising water consumption is to: • Monitor water consumption • Optimise backwashing frequency and timing • Backwash water recycling • Backwash water re-use (where water is scarce)	No existing EU Ecolabel criteria

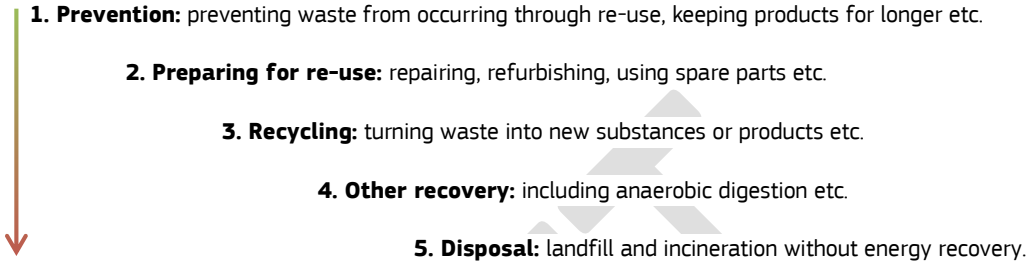
The table above indicates that the EU Ecolabel energy and disinfectant criterion for tourist accommodation are in line with best practice measures. There are, however, no specific water criteria for swimming pools in the current EU Ecolabel.

Best practice water management for tourist accommodation relates primarily to optimising backwash procedures to ensure water loss is minimised. It is suggested that this is considered when revising the current EU Ecolabel criteria.

4.2.2 Accommodation waste generation

Waste generation is another significant impact of tourist accommodation. Article 4 of the revised EU Waste Framework Directive, identifies the waste hierarchy (Figure 25) which sets out steps for dealing with waste in order of environmental preference. Waste prevention is the most preferred, with disposal, at the bottom of the hierarchy, least preferred.

Figure 25: Waste hierarchy



Source: gov.uk. (Available at: https://www.gov.uk/waste-legislation-and-regulations)

In line with this, best practice for tourist accommodation is to prevent and avoid waste. The BEMP actions can help to achieve this:

- A waste survey or inventory could be developed to help understand where waste is produced, and how it can be reduced.
- Procurers can reduce waste in a number of ways: efficient ordering and storage can reduce the need to throw away unused or spoiled products; where possible, packaging to be returned for re-use; and products with less packaging can be selected.
- The housekeeping function can help to reduce waste by replacing individually wrapped soaps and shampoos with bulk items, or dispensers. The use of liners in bins should also be avoided, or these should be re-used.
- Any caterers on site should only use re-usable glasses, plates and cutlery. Single-use products should also be avoided and food cooked to order where possible.
- At the reception, documents should only be printed when necessary.

Even where the actions above are taken, waste will not be eliminated. Emphasis should therefore be placed on recycling of waste. Table 17 shows the CO_2 emissions avoided where recycling takes place.

Table 17: GHG emissions avoided per kg of different types of waste recycled

Material	Glass	Board	Wrapping paper	Dense plastic	Plastic film
Kg CO_2	0.39	1.08	0.99	1.20	1.08

Source: WRAP (2011) *the composition of waste disposed of by the UK hospitality industry*; cited in JRC IPTS (2013), Reference Document on Best Environmental Management Practice in the Tourism Sector

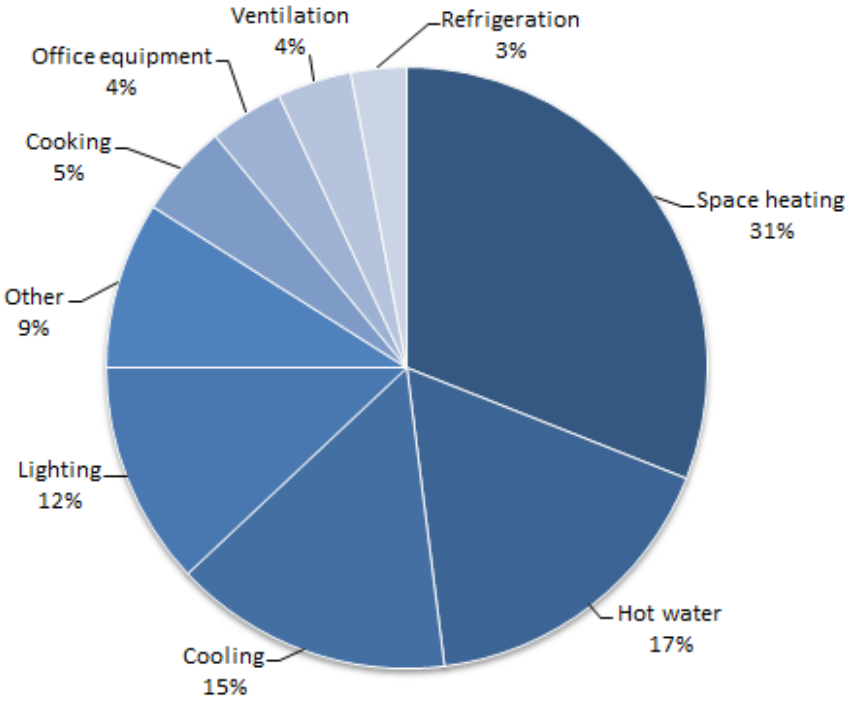
Best practice measures for separating and recycling waste include:

- Monitoring and reporting of waste generation, by type of material
- Procurement of products with packaging made from recycled and recyclable materials
- Installation of separate waste collection bins in guest and staff areas – staff should be trained to ensure waste separation is carried out.

4.2.3 Accommodation energy consumption

Energy consumption in tourist accommodation sites can be significant. Figure 26 identifies the key areas on energy use in hotels. The most significant portion of this, 46%, relates to heating and cooling of the site (space heating 31%, cooling 15%) with water heating (17%) and lighting (12%) also showing significant energy consumption.

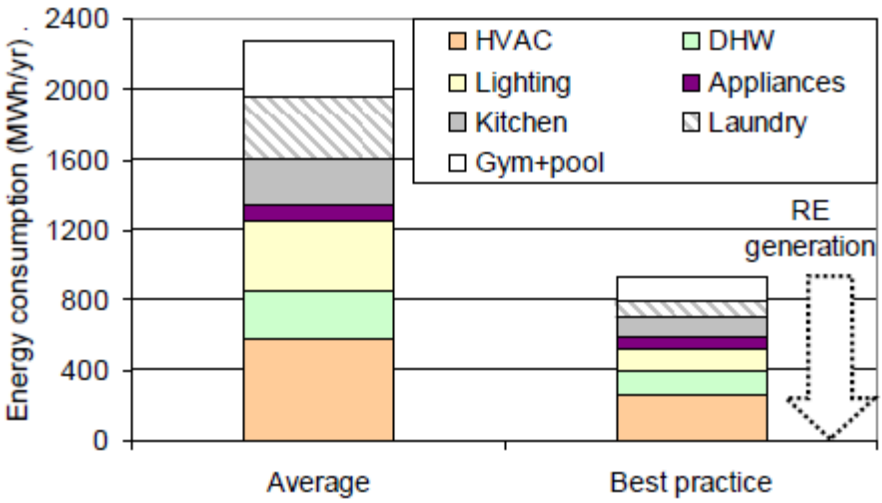
Figure 26: Energy consumption by end-use in hotels



Source: Data from HES (2011), cited in JRC IPTS (2013), Reference Document on Best Environmental Management Practice in the Tourism Sector

Figure 27 provides a modelled example of how good management can reduce energy use in a hotel by over 50%. Key areas where energy use can be significantly reduced include: heating, ventilation and air conditioning (HVAC); lighting; and laundry.

Figure 27: Modelled average and achievable best practice energy consumption for a 100-room 5,300m² hotel



NB: assumes average occupancy rate of 80% of rooms (of which 25% double occupancy).
Source: JRC IPTS (2013) Reference Document on Best Environmental Management Practice in the Tourism Sector

To achieve these energy reductions, a number of BEMP activities can be undertaken:

- Monitoring and measurement of energy use (including sub-metering, inspection and maintenance, staff and guest training, adequate insulation, automated control, energy management plans) can be effective in understanding where energy use can be minimised.
- Buildings should either be built, or retrofitted, to minimise heating and cooling energy requirements.
- HVAC energy consumption can be minimised by installing zoned temperature controls and by ensuring all equipment meets energy efficiency requirements.
- Energy efficient lighting (including a control system for this) should be installed.

Once these measures to reduce energy demand have been implemented, further reductions in the use of primary energy can be made by increasing the supply of renewable energy; in particular, installing onsite systems such geothermal, solar or wind.

4.2.4 Other areas

In addition to reducing energy, water and waste across tourist accommodation sites, BEMP has also been developed for other specific impact areas including kitchens and campsites:

4.2.4.1 Kitchens

Most larger hotels, and a number of smaller tourist accommodation sites, offer some food service to guests. Kitchens can use large amounts of energy and water, and often generate large quantities of organic waste in particular. BEMP to reduce the impacts of these include:

- Energy reduction through procurement of efficient cooking and refrigeration equipment including ventilation control.
- Reduced water consumption through procurement of efficient dish washing equipment.
- Minimisation of avoidable food waste by careful menu development and controlled portion sizes. Where food waste is produced, this should be separated from other waste streams and sent for anaerobic digestion, incineration with energy recovery or composting.
- Energy and water use and waste generation should be measured and monitored.

4.2.4.2 Campsites

Campsites are typically assumed to have a lower environmental impact per guest-night than hotels or other tourist accommodation. This is primarily because facilities such as catering, laundry services and swimming pools are not as widely available. Campsites are most often located in rural areas, and their main environmental impacts arise from transport to and from the site and from visitor impacts on local biodiversity [JRC IPTS (2013)]. Campsites can nevertheless put practices in place to reduce energy and water use and waste generation.
BEMP for campsites includes:

- Providing guests with information and activities on local biodiversity.
- Effective management of green areas of the site including: encouraging biodiversity; planting native species; installing green or brown roofs and walls; and minimising on site light pollution.
- Ensuring all HVAC, lighting and water-heating systems are energy efficient.
- Installation on on-site renewable energy generation where feasible.
- Minimisation of water consumption through installation of low-flow taps and showers (including shower timer controls) and low or dual flus WCs.
- Encourage waste prevention and recycling on site.
- Installing or converting an existing swimming pool to a natural pool.

4.3 Life Cycle Assessment literature review

A review of available Life Cycle Assessment (LCA) studies for tourism services has been undertaken, to support the current revision of the EU Ecolabel criteria for Tourist accommodation and Campsite services. This analysis aims to identify the main environmental areas of concern and life cycle hot-spots for tourist accommodation.

In order to establish a basis for the criteria revision process, a number of existing LCA studies have been screened; applying common criteria on quality and relevance. The main results have been analysed, and conclusions drawn for this study.

4.3.1 Selection of LCA studies

This section outlines how appropriate and relevant LCA studies have been identified for further analysis and practical application to the revision of the EU Ecolabel criteria for tourist accommodation.

4.3.1.1 Description of the LCA studies

The papers identified as potentially relevant for the aim of the environmental analysis of this product group can be classified as:

- Papers focusing on methodologies for the performance of LCA in tourist services
- Papers addressing LCA case studies that only include indicators on energy and global warming potential (GWP).
- Papers addressing LCA case studies that include a broader range of indicators (energy, GWP, waste, consumption of water etc.).

Among the papers identified, there are very few which actually carry out an LCA study in full; instead, the majority of studies focus on the methodology which could be used to carry out an LCA. Therefore, little information was available for an environment assessment of this product group from a life cycle perspective. The main reason behind this lack of literature is the common view that LCA is a tool to assess the environmental performance of goods, rather than services. Furthermore, the complexity of tourist systems and the lack of specific LCA databases for the tourism sector also result in a lack of LCAs carried out for the tourism industry [De Camillis C. et al. (2010)].

4.3.1.2 Screening of LCA studies

The steps outlined below indicate the process that was undertaken to identify studies which are relevant to this report.

Step 1: Preliminary identification of key environmental issues:

In the first screening stage, a set of relevant key environmental indicators have been identified based on available Product Category Rules (PCR) and a review of relevant reference documents.

There is no PCR for tourist accommodation available, but the PCR Basic module on "Accommodation, food and beverage services" [Environdec, (2013)] requires the following information to be provided:

a. Use of resources
   - ✓ Non-renewable resources

- ✓ Material resources
- ✓ Energy resources (used for energy conversion purposes)
- ✓ Renewable resources
- ✓ Material resources
- ✓ Energy resources (used for energy conversion purposes)
- ✓ Secondary resources
- ✓ Material resources
- ✓ Energy resources (used for energy conversion purposes)
- ✓ Recovered energy flows (such thermal) expressed in MJ
- ✓ Water use divided in:
- ✓ Total amount of water
- ✓ Direct amount of water used by the core process

b. Potential environmental impacts

- ✓ Emission of greenhouse gases (expressed as the sum of global warming potential, GWP, 100 years), in carbon dioxide (CO_2) equivalents.
- ✓ Emission of acidifying gases (expressed as the sum of acidification potential, AP) in sulphur dioxide (SO_2) equivalents.
- ✓ Emissions of gases that contribute to the creation of ground level ozone (expressed as the sum of ozone-creating potential, POCP), in C_2H_4 (ethylene) equivalents.
- ✓ Emission of substances to water contributing to oxygen depletion (expressed as the sum of eutrophication potential, EP), in phosphate (PO_4^{3-}) equivalents.

c. Waste production

- ✓ Hazardous waste, in kg (as defined by regional directives)
- ✓ Non-hazardous waste, in kg

The first rule applied to the identification of relevant papers for this study, has been compliance with at least the following information of the PCR:

- Energy resources
- Emission of greenhouse gases (expressed as the sum of global warming potential, GWP, 100 years), in carbon dioxide (CO2) equivalents
- Waste production.

The papers focusing only on a proposed methodology have been ruled out of this preliminary identification.

Step2: Screening of case studies:

The studies identified have been screened in order to select those that satisfy the requirements for quality and relevance.

In order to select the LCA studies to be evaluated, minimal cut-off requirements have been set for:

- ✓ *Scope:* functional unit properly defined and relevant for this revision, scope coherent with goal analysis, respect of ISO 14040 standard
- ✓ *Impact assessment:* satisfactory broadness or quality of the indicator(s) considered in the analysis.
- ✓ *Outcomes* (relevant and applicable).
- ✓ *Peer review*

Studies passing these criteria have been classified as relevant and used to analyse the life cycle hot-spots of Tourist Accommodation services. However, the disregarded studies have been classified as complimentary and used for dealing with some issues relevant for the revision process. The results of the screening are shown in Table 18: Results of LCA literature screening.

Table 18: Results of LCA literature screening

Source	Title	Subject of the study	Functional unit	System boundary	Time related coverage	Study type	Impact assessment	Data quality	Notes	Result of screening
Castellani V. and Sala S. (2012)	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	Comparative analysis of Environmental footprint and LCA as methodologies to assess the sustainability of tourist accommodation	One-week holiday in Northern Italy in seven different tourist accommodation	1) Construction of tourism facilities 2) Accommodation services and activities during holidays 3) Travel involved to arrive and come back	80 years	Building life-cycle: construction, use and demolition	Eco-indicator 99 impact assessment Human health Climate change Radiation Ozone layer Ecotoxicity Acidification/ Eutrophication Land use, Minerals Fossil fuels	LCIA developed by Simpapro and Eco-indicator 99, based on average characteristics of tourist accommodation in North of Italy	Paper published in Ecological Indicators	Scope ☑ Impact assessment ☑ Outcomes ☑ Peer review ☑ **Paper classified as relevant**
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	Life Cycle Energy Analysis (LCEA) applied to two tourism accommodation facilities in Poole, Dorset (UK) to quantify their CO2 emissions.	1 guest night 1 m2 of the hotel floor area as an additional functional unit for LCA analysis	Operational energy consumption	1 year	Building life-cycle: construction, use and demolition	CML 2001, midpoint LCA: Energy consumption and GHG emissions	SimaPro 7.1 software The Ecoinvent database	Paper published in Journal of Cleaner Production	Scope ☑ Impact assessment ☒ Outcomes ☑ Peer review ☑ **Paper classified as complimentary**
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	The aim of the study was to assess the environmental performance of accommodation services (i.e., parking, reception and administration, lodging, and breakfast) in order to identify environmentally crucial points.	An overnight stay of one guest with breakfast and car-parking services included.	Life cycle macro-phases: transport to the hotel, accommodation services and transport back home.	1 year	'from-door-to-door' LCA modular LCA approach	CML 2001, acidification abiotic depletion eutrophication global warming ozone layer depletion photochemical ozone creation freshwater, marine, aquatic, terrestrial ecotoxicity human toxicity radioactivity	GaBi4	Paper published in Progress in Industrial Ecology – An International Journal	Scope ☑ Impact assessment ☑ Outcomes ☑ Peer review ☑ **Paper classified as relevant**

Source	Title	Subject of the study	Functional unit	System boundary	Time related coverage	Study type	Impact assessment	Data quality	Notes	Result of screening
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	LCA to improve the sustainability of tourist establishment on Balearic Islands (initial phase study)	6.000 m2 of hotel with 40 years of lifetime, with capacity for 400 people, with air conditioning and heating oil.	Three phases of the Hotel life cycle: production of construction materials, use phase, demolition and waste treatment.	40 years	Building life-cycle: construction, use and demolition	Depletion of resources, Global Warming Potential, Ozone Depletion Potential, Acidification Potential, Eutrophication,water consumption and energy consumption	CML of Leiden University, ELCD of the European Platform on LCA and Gemis 4.4 of Oeko-Institut LCA studies on building materials	Conference Paper In proceeding of: ICREPQ 08, At Santander (Spain)	Scope ☑ Impact assessment ☑ Outcomes ☑ Peer review ☒ Paper classified as complimentary
Beatriz Roselló-Batle, et.al (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	LCA Hotel building	Several hotels in Balearic Islands	Four phases of the Hotel life cycle: extraction, operational phase, refurbishment, demolition.	50 years	Building life-cycle: construction, use and demolition	Energy use, CO2 emissions, waste generation at the four defined phases of the life cycle.	data bank BEDEC PR/PCT and ecoinvent v.1.3.	Paper in Journal Energy and Buildings	Scope ☑ Impact assessment ☒ Outcomes ☑ Peer review ☑ Paper classified as complimentary

4.3.2 LCA studies selected for further, detailed analysis

Against these cut-off requirements, the following studies pass the quality check, and have been identified as *relevant* studies:

- Castellani V. and Sala S. (2012): This article presents a comparative study about sustainability evaluation of tourism activities, based on the methodologies of Ecological Footprinting (EF) and Life Cycle Assessment (LCA). Both methods are applied to two case studies and the results of the two approaches are compared to investigate the possibility of the joint use two methods for assessing the sustainability of tourism activities.
- Camillo De C. et al (2010a): In order to gain a better understanding of the limited application of LCA in the tourism sector, the authors of this paper have critically reviewed the international literature and have carried out a case study on an Italian hotel. The product system covers two macrophases (transport and accommodation) and reveals the significant impact of transport on the whole life cycle of tourist experience. The authors suggest the development of an optimized EU Ecolabel criterion which focuses on transport.

The following have been identified as *complimentary* studies:

- Filimonau V. et al. (2011): This study discusses the potential for Life Cycle Assessment (LCA) to be utilized for the environmental assessment of tourism accommodation facilities, including their contribution to global carbon footprint. A Life Cycle Energy Analysis (LCEA) is applied to two tourism accommodation facilities to quantify their CO2 emissions.
- Beatriz Roselló-Batle et al. (2009): This study identified the processes that have had the greatest impact on the life cycle of a sample of hotels from the Balearic Islands. In order to do this, energy uses, CO2 emissions and waste materials generated have been estimated. This reveals that the operating phase, which represents between 70% and 80% of total energy use, is the phase with the greatest impact.
- B. Roselló et al. (2008): This publication describes the initial stage of a study which aims to improve the sustainability of tourist establishments on the Balearic Islands through utilising an LCA methodology. A case study on Balearic Island hotels is carried out, but *results are not provided* as the study is at its initial stage.

4.3.3 Detailed analysis of the selected LCA Studies

The corresponding objects investigated in the different LCA studies are outlined in Table 19 : below.

Table 19 : Description of objects investigated and their characterisations

Studies	Title of the studies	Object investigated	Characterisation
Relevant studies			
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	One-week holiday in Northern Italy in seven different tourist accommodations. One bednight in a 2star hotel. Hospitality structure and spa services of an Italian hotel	1-2* hotel, 3* hotel, 4* hotel, second house, Agritourism, B&B, Camping site

Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	Duca dÁosta Hotel	3 star hotel located in Pescara, Italy.
Complimentary studies			
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	Several hotels in Balearic Islands	In the construction/demolition phases three hotels in the Balearic Islands were analysed. All three were 4-star hotels. For the operation phase the annual energy use data of a sample of 33 hotels in the Islands were used.
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	1 guest night 1 m2 of the hotel floor area as an additional functional unit for LCA analysis	Two hotels of the same category (3*) and geographical location (Poole, Dorset UK), with similar annual occupancy rates (around 90%) and room numbers (around 85), relyingon traditional energy production technology.
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	Several hotels in Balearic Islands	Beach andcity, three and four stars hotels, with their respective combinations

4.3.3.1 Goal and scope

The goal and scope of the selected studies are described in Table 20 : . The selected LCA studies have to be based on the ISO standards for life cycle assessment (ISO 14040 and 14044). A life cycle assessment analyses the environmental impacts of products or services associated with all the stages of its life. Regarding the variation of the object studied and the methodological choices made by the few LCA implementations found in the literature, different LCA variants have been further analysed. Studies addressing the building life-cycle, construction, use and demolition as well as studies following a 'from-door-to-door' perspective (which includes departure, stay in the tourist destination and return) have been considered relevant.

Table 20 : Goal and scope of the studies

Studies	Title of study	Goal of study	Scope	Study Type
Relevant studies				
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	Comparative analysis of Environmental footprint and LCA as methodologies to assess the sustainability of tourist accommodation	LCA covering Construction of tourism facilities; Accommodation services and activities during holidays; Travel involved to arrive and come back	The approach taken in this paper is the attributional LCA approach.
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	The aim of the study was to assess the environmental performance of accommodation services (i.e., parking, reception and administration, lodging, and breakfast) in order to identify environmentally crucial points.	'from-door-to-door' LCA modular LCA approach	Modular LCA approach which permits the combination of the main processes of the system
Complimentary studies				

Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	The aim of this study is to identify the processes that have had the greatest impact on the life cycle of a tourist building	Building life-cycle: construction, use and demolition	A fast-track LCA. A fast track LCA is different from a "classic" LCA in terms of the output of a classical LCA being input for the fast-track calculations.
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	Life Cycle Energy Analysis (LCEA) applied to two tourism accommodation facilities in Poole, Dorset (UK) to quantify their CO2 emission	Building life-cycle: construction, use and demolition	The approach taken in this paper is the attributional LCA approach.
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	To conduct an analysis of tourism and its impact, establishing energy indicators and the types of establishments that operate on the Balearic Islands.	Building life-cycle: construction, use and demolition	Not specified

4.3.3.2 Functional units and system boundaries

According to ISO 14040/44, the functional unit refers to a quantified performance of a product system for use as a reference unit in LCA studies. The system boundary describes which processes are taken into account in the LCA analysis and which processes are not. The functional units and system boundaries of the selected studies are described in Table 21.

Table 21 : Functional units and system boundaries

Studies	Title of the studies	Functional Unit	System boundary
Relevant studies			
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	One-week holiday in Northern Italy in seven different tourist accommodation (1-2* hotel, 3* hotel, 4* hotel, second house, Agritourism, B&B, Camping site) 1 guest night in a 2* hotel	1. Construction of tourism facilities: the extraction of raw materials; production of the building materials; the construction of the building; 2. Accommodation services and activities during holidays: the use and management of the building (including hotel maintenance activities), goods and services provided to guests (related to the quality level of the accommodation, i.e. number of stars); 3. Travel involved to arrive and come back
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	An overnight stay of one guest with breakfast and car-parking services included.	Life cycle macro-phases: transport to the hotel accommodation services and transport back home.
Complimentary studies			
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	Several hotels in Balearic Islands	Four phases of the Hotel life cycle: extraction, operational phase, refurbishment, demolition.

Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	1 guest night 1 m2 of the hotel floor area as an additional functional unit for LCA analysis	Building life-cycle: construction, use and demolition. Maintenance and refurbishment included.
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	6.000 m2 of hotel with 40 years of lifetime, with capacity for 400 people, with air conditioning and heating oil.	Three phases of the Hotel life cycle: production of construction materials, use phase, demolition and waste treatment.

4.3.3.3 Allocation

Where allocation is considered in the studies, this is outlined in Table 22.

Table 22 : Allocation applied

Studies	Title of the studies	Allocation parameter
Relevant studies		
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	Not specified
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	Electricity consumption could not be estimated in some specific cases without carrying out an allocation. For instance, in the case of lighting and cleaning of those areas (corridors, and steps) common to different accommodation services (e.g., lodging and breakfast), the electricity consumption was allocated according to the overall surface used by each service. (Specific numbers not provided)
Complimentary studies		
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands.	Not specified
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	Laundry: 3 kWh of energy allocated to '1 guest night' Breakfast: 5 kWh of energy allocated to '1 guest night'
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	Not specified

4.3.3.4 Data quality requirements and data sources

Data quality level and sources of primary and secondary data should be documented. The time-related and geographical representativeness of the selected LCA studies together with the information on the data source (including primary and secondary data) are summarised in Table 23.

Table 23 : Data quality and sources

Studies	Title of the studies	Time-related coverage	Geographical area	Data sources of primary data	Data sources of secondary data
Relevant studies					
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	80 years	Italy	Direct interviews with the hotel manager, hotel registers of consumption (e.g. electricity, gas and water bills), and tourist surveys.	Local tourism statistics offices (arrivals, number of nights stay, and origin of the tourists) and from national and international databases
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	1 year	**Transportation macrophase:** travellers' place of origin (Northern Italy, Central Italy, Southern Italy, major Italian islands and Europe). **Accommodation macrophase:** Pescara, Italy.	**Transportation macrophase:** Rypdal (2000), (IDEMAT, 2001), (ACI, 2010). **Accommodation:** On-site data collection, GaBi professional database (PE International, 2006).	**Transportation macrophase:** Data from questionnaires submitted to guests and from an interview with the hotel manager.
Complimentary studies					
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	50 years	Balearic Islands	Construction projects, surveys, data bank BEDEC PR/PCT	ecoinvent v.1.3.
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as an holistic method for carbon impact appraisal of tourist accommodation	1 year	UK	Operational data of energy consumption: primary data from measurements in 2008	For catering and laundry services these energy use values are however calculated on the basis of the hotel managers' estimates and data retrieved from the literature
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	40 years	Balearic Islands	CML of Leiden University, ELCD of the European Platform on LCA and Gemis 4.4 of Oeko-Institut (Institute for Ecology Applied).	Results of LCA studies on building materials will be used.

4.3.3.5 Impact categories and impact assessment methods

The environmental impacts considered and assessment methods applied are described in Table 24.

Table 24 : Impact categories and impact assessment methods

Studies	Title of the studies	Impact assessment methods	Impact categories
Relevant studies			
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	Eco-indicator 99 impact assessment	• Eco-indicator 99 impact assessment • Human health • Climate change • Radiation Ozone layer • Ecotoxicity • Acidification/ • Eutrophication • Land use • Minerals • Fossil fuels
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	CML	• acidification (AP) • abiotic depletion (ADP) • eutrophication (EP) • global warming (GWP) • ozone layer depletion (ODP) • photochemical ozone creation (POCP) • freshwater (FAETP) • marine aquatic (MAETP) • terrestrial (TETP) ecotoxicity human toxicity (HTP) • radioactivity (RAD).
Complimentary studies			
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	No method for impact assessment	Energy use, CO2 emissions, waste generation at the four defined phases of the life cycle.
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation.	CML 2001, midpoint LCA	Energy consumption and GHG emissions
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	CML	• Depletion of resources, • Global Warming Potential, • Ozone Depletion Potential, • Acidification Potential, • Eutrophication, • Water consumption and energy consumption

4.3.3.6 Assumptions

While modelling, a series of assumptions has to be made. Documentation of these assumptions is crucial is any study to ensure the transparency and replicability of the results. The main assumptions for each study are therefore summarised in Table 25.

Table 25 : Assumptions made while modelling

Studies	Title of the studies	Transport	Construction	Use/ accommodation	Maintenance/ refurbishment	Dismantling
Relevant studies						
Castellani V. and Sala S. (2012):	Ecological Footprint and Life Cycle Assessment in the sustainability assessment of tourism activities	Travel includes the travel from home to the destination and back again, assuming that both journeys are made using the same type of transport. This was calculated by using a weighted average of the travel distances	Not assumptions specified	The amount of waste for every single night spent in a hospitality structure was considered equal to the amount of waste produced by a local resident during one day	Not addressed	Not addressed
Camillo De C. et al (2010a)	Life cycle assessment in the framework of sustainable tourism: a preliminary examination of its effectiveness and challenges	No assumptions specified	Buildings were not included given the impossibility of reducing the environmental burden of structures that already exist, at least as regards the construction phase.	• A modular LCA approach was adopted which permits the combination of the main processes of the system (e.g., reception and administration, and lodging services) with additional activities, (e.g., breakfast and parking). • -Water consumption was measured through bills, whilst the waste water amount was assumed to be equal to that consumed because of the lack of measurement systems of waste water. • Concerning structures (such as the hotel buildings) and durable goods (such as technical equipment, furniture, and others), only data on their usage have been included (thus excluding upstream and downstream phases, such as construction/manufacturing and demolition/end-of-life management).	Not addressed	Not addressed
Complimentary studies						

Studies	Title of the studies	Transport	Construction	Use/ accommodation	Maintenance/ refurbishment	Dismantling
Beatriz Roselló-Batle et al. (2009)	Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands	Not addressed	Transport of materials from factory to construction and the waste of manufacturing materials are not included	Energy use data of a sample of 33 hotels including 2 hotels from construction phase. Lifetime of 50 years	No assumptions specified	• -The third hotel considered in the construction phase is not yet operative, so data for this phase is not available • Supposition: almost the same elements (or similar) will constitute the building at the end of its lifetime.
Filimonau V. et al. (2011)	Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation	Not addressed	The 'indirect' embodied energy and associated carbon footprint of the hotel buildings were assumed as equal to 15% of the total operational energy requirements within the building's lifecycle	• The energy and environmental characteristics of the hotel building been assumed to remain homogeneous during its service life. • Preparation of 1 food is assumed to consume 5kWh • All guests assumed to have breakfast in Hotel 1 and 50% of guests ordered breakfast in Hotel • It has been assumed that both restaurants use natural gas for food preparation • 1 kg laundry is assumed to consume 3 kWh	Not addressed	Not addressed
B. Roselló et al. (2008)	Improving the Environmental Sustainability of hotel buildings through the analysis of its Life Cycle. Case Study: Balearic Islands. Initial phase.	Displacements by plane, boat and car of travellers left beyond the limits of the study.	Data lack on energy consumption and waste production during construction. In this phase, only production of construction materials and its transport will be addressed.	• Lifetime of 40 years • Data lack on waste generation during operational phase (waste production excluded) • Furniture left beyond the limits of the study.	Not addressed	No assumptions specified

4.3.4 Results of the selected LCA studies

The results of each of the *relevant* studies (as identified in the section above) are outlined in this section.

4.3.4.1 Relevant studies

Results from the study by Castellani V. and Sala S. (2012):

This paper compares two methodologies in order to assess sustainability of tourism activities and identify the environmental foot print and undertake a Life Cycle assessment. For this purpose, the following case studies were developed:

- LCA of one-week holiday in seven hotels of different categories
- LCA of one bednight in a 2 star hotel
- LCA of the hospitality structure and spa services

An LCA of a one-week holiday was undertaken, assuming three different the means of transport used by tourists. The overall impact of the holiday is mainly due to travelling by car (70%), followed by electricity consumption (7.8%), restaurant (4.5%), excursions, i.e. local mobility, (2.3%) and laundry services (0.8%).

Figure 28 plots the results of the impact categories score for a one-week holiday, made by car. The impact on carcinogens, respiratory organics, ionising radiation, ozone layer depletion, land use, and minerals resources is negligible. However, relevant impacts can be seen for respiratory inorganics (e.g. particulate matter), climate change and fossil fuels consumption. Fossil fuel consumption is mainly the result of using oil as car fuel (70%) and electricity consumption (6.3%).

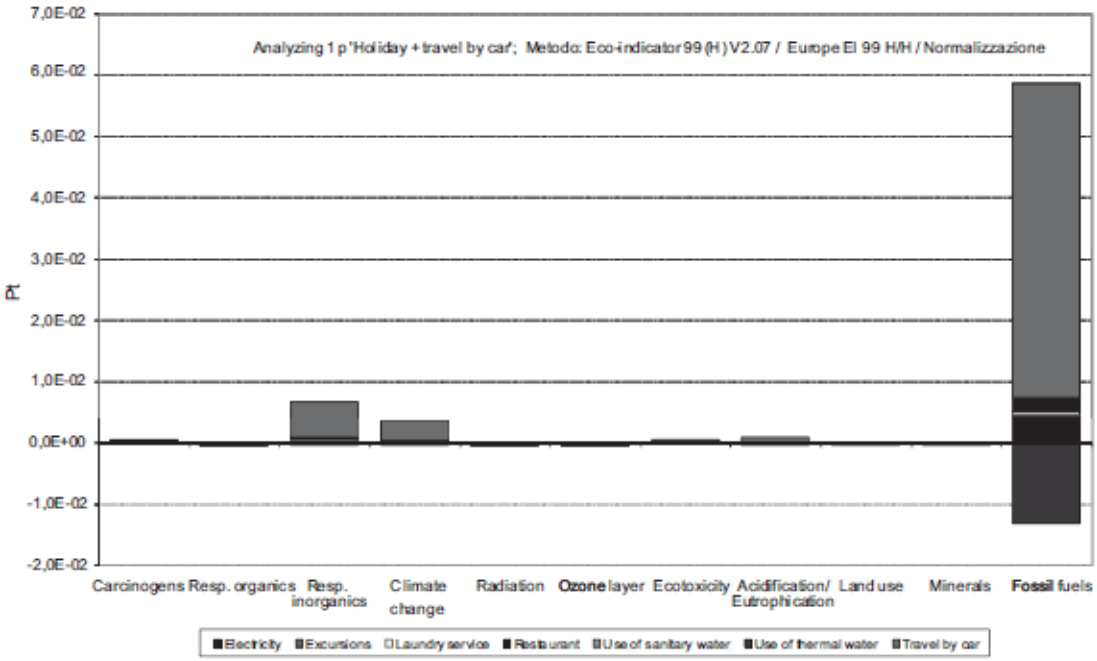


Figure 28: Results of the impact categories score for a one-week holiday, reaching the destination by car (Castellani and Sala, 2012)

According to this study, 71% of the impact on respiratory inorganics is due to car use (emissions of NOx, SOx and PM), 16% to electricity consumption (emissions of NOx, SOx and PM) and 9% to excursions (emissions of NOx, SOx and PM).
83.3% of the impact on climate change is due to car use (which cause emissions of CO, CO_2 and CH_4) and 11% due to electricity consumption (emissions of CO_2 and CH_4).

The LCA of one bednight in a 2 star hotel excluded the impacts relating to travel and excursions, in order to investigate the specific impacts caused by a tourist staying in the hotel. According to the results of this analysis, electricity use is the most relevant source of impact in almost each damage category. In respect of fossil fuels and respiratory inorganics, a negative impact was registered (i.e. a positive contribution) due to the use of thermal water and restaurant activities (which included the recycling of food and packaging) (Figure 29).

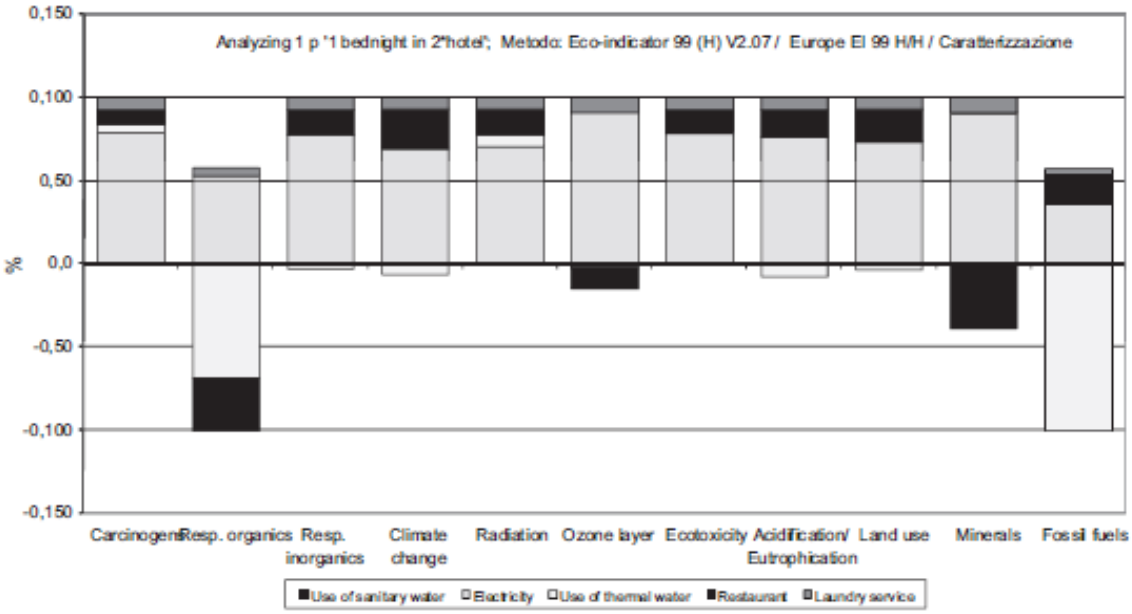


Figure 29: Damage characterization of one bednight in a 2* hotel (Castellani and Sala 2012)

The results of the LCA of the hospitality structure and spa services of an Italian hotel show that the most relevant impact categories are respiratory inorganics, climate change and fossil fuels (Figure 30).

According to the study, the negative values are due to the positive contribution of separate waste collection and the use of thermal water, reducing the need for energy to heat the water.

68.5% of the impact on respiratory inorganics is due to electricity consumption, and 22.4% to the hotel assembly. In addition, the contribution to climate change comes mainly from electricity consumption (69.4%), hotel assembly (16.9%) and from the transportation of food from the retailer to the hotel (10.8%).

The impact on fossil fuels is primarily due to electricity consumption (59.8%), gas consumption related to the restaurant (19.6%) and to the assembly of the hotel (19.6%); mainly for the transportation of construction materials.

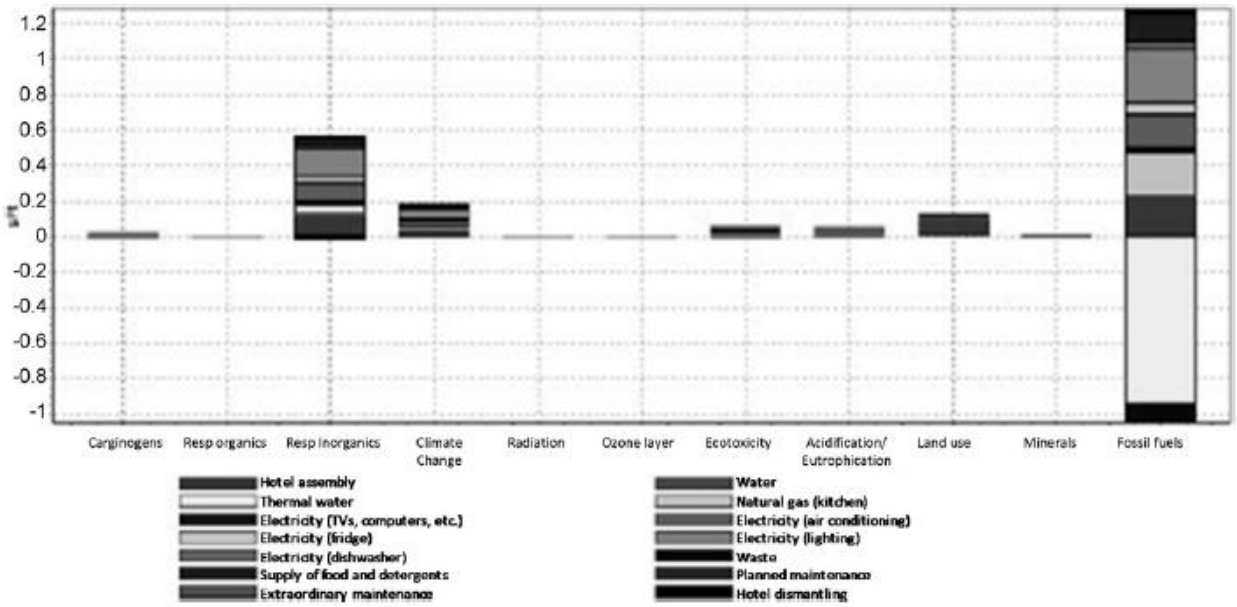


Figure 30: Results of the impact categories score for the hotel life-cycle

Results from the study by Camillo De C. et al (2010a):

For this study the product system was modelled according to a 'from-door-to-door' perspective, which includes guest movements from home to home (i.e., departure, stay in the tourist destination and return). The author distinguishes two main subsystems: passenger transportation and accommodation Services.

The results show that both the transport system and accommodation services are important environmental points.

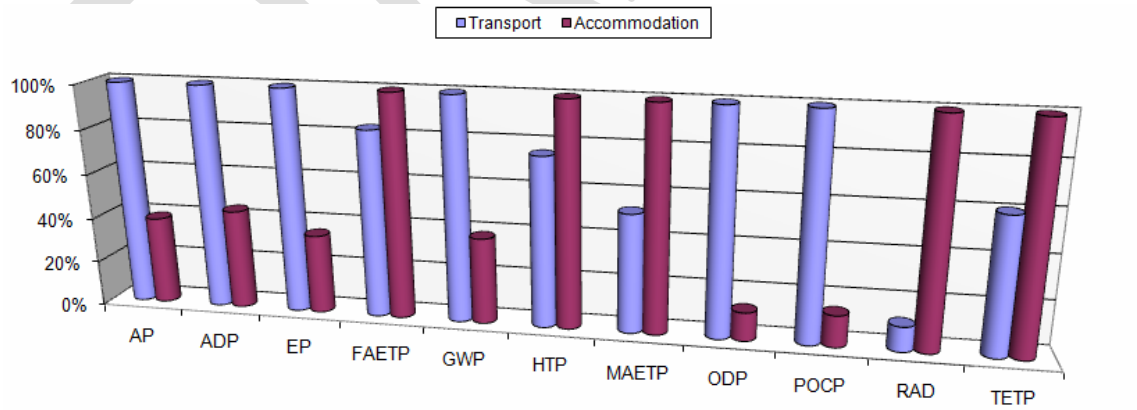


Figure 31: Characterisation result comparison for transport and accommodation macro-phases (source: Camillo De C. et al (2010a))

The transport system has a higher impact than accommodation services in a number of categories, including: acidification (AP), abiotic depletion (ADP), eutrophication (EP), global warming (GWP), ozone layer depletion (ODP) and photochemical ozone creation (POCP). However, accommodation services have a greater effect on three ecotoxicity categories –

freshwater (FAETP), marine aquatic (MAETP) and terrestrial (TETP) ecotoxicity – as well as human toxicity (HTP) and radioactivity (RAD). (Figure 31)

If the system macro-phases are analysed in detail, focusing on the transport modes used by domestic guests, it can be seen that *passenger transportation (via petrol and diesel-fuelled cars) is the most burdening process;* considering also the large number of this type of vehicle in the Italian vehicle stock. On the other hand, *air transport is the main environmental issue for passenger transportation from Europe.*

In the accommodation macro-phase, the characterisation results highlight 'lodging' and 'reception and administration' systems as crucial points. In particular, the *'lodging' system is potentially more responsible than 'reception and administration' across all impact categories.* Moreover, a deeper analysis of characterisation results has shown that *energy production (power and thermal energy) and some disposal processes in landfill are the main burdening processes.*

In addition to classification and characterisation, normalisation and weighting were also implemented for the whole system. The weighting phase, with Southern Europe as spatial reference, has identified global warming and abiotic depletion as the most burdening impact categories. However the weighted results cover transportation and accommodation subsystems; no separation of the burden categories by subsystem is made by the authors at this phase.

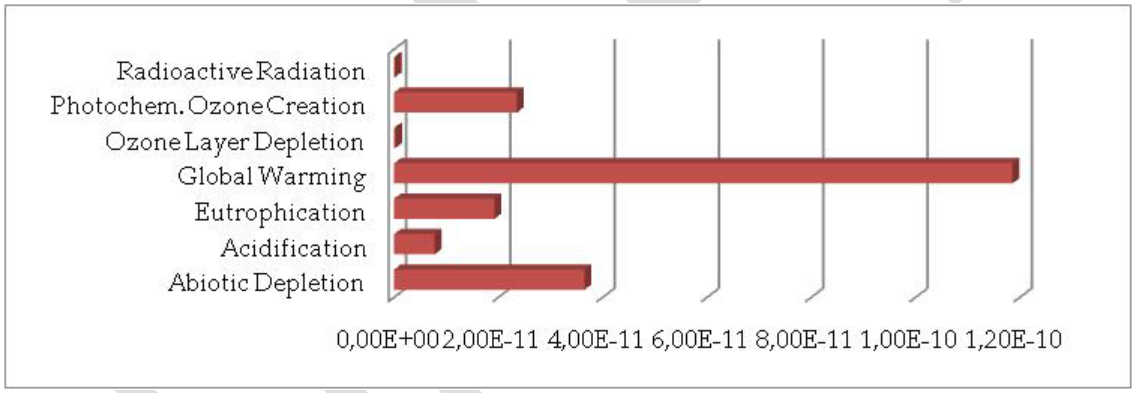


Figure 32: Normalisation results (source: Camillo De C. et al (2010a))

Therefore, in order to substantially improve the environmental performance of the system analysed, the authors identify some preliminary actions:

- *Switching towards supplies of energy from renewable sources*
- *Energy saving policies* (e.g. switching to lower consumption lamps and electric appliances, as well as daylighting devices etc.)
- Hotel guests could be directed towards *more environmentally-friendly transport solutions.*
    - For instance, *train transportation* could be promoted through campaigns and environmental marketing. The author gives several examples of different initiatives in this field. One of them, performed by Trenitalia and the Hotelier Association of Riccione aim to promote train transport by refunding tickets to passengers who spend at least one week in the association's hotels during summertime.

- Regarding *road transportation (bus and cars)*, more environmentally-sound solutions should be promoted (e.g. Liquefied petroleum gas (LPG) and methane-fuelled vehicles, travelling in groups, car-pooling, etc.), whereas transport using petrol and diesel engines, or single-passenger car travel should be discouraged.
- *Separate collection of waste* not only in the hall, but also in the hotel rooms.
- *Selection of suppliers* (i.e. laundry and linen washing and dry-cleaning companies) with a better environmental performance;
- Provision of more *environmentally-sound food for breakfast*.

However, the author states that specific improvement scenarios should be identified and that actual environmental improvement potential should be carefully assessed before any implementation.

Finally, the author pointed out a few notable contradictions in the current criteria for the European Ecolabel for tourist accommodation services as a result of the LCA findings. Specific advice is given in order to improve the EU Ecolabel:

1. Current *energy criteria* includes the possibility of supplying electricity from non-renewable sources if the tourist accommodation has "no access to a market that offers electricity generated from renewable energy sources". The author claims that this criterion does not take into account the potential of tourist activities in generating energy (i.e., solar or wind energy) by themselves or in cooperation with other organisations.
2. *Guest transportation* (from home to home), has been identified as having a significant environmental impact in the LCA study. However, the author suggests that this is not sufficiently regulated in the framework of the EU Ecolabel. Current criteria on guest transportation encouraged provision of information on public transport to guests and staff by tourist organisations. It is suggested that more effective actions to promote the most environmentally-sound forms of transport should be better considered, including a method to discourage the most polluting forms of transport.

4.3.4.2 Complimentary studies

Results from the study by Beatriz Roselló-Batle et al. (2009):

The balance between energy use, Co2 emissions and waste generation is considered in Figure 33. It can be seen that the distribution of these three indicators are very similar between both hotels. *The operating phase is responsible for the greatest environmental impacts of the whole building.*

The electrical energy production system in the Balearics (where coal is used as the main source of primary energy) is one of the greatest pollutants in this autonomous community.

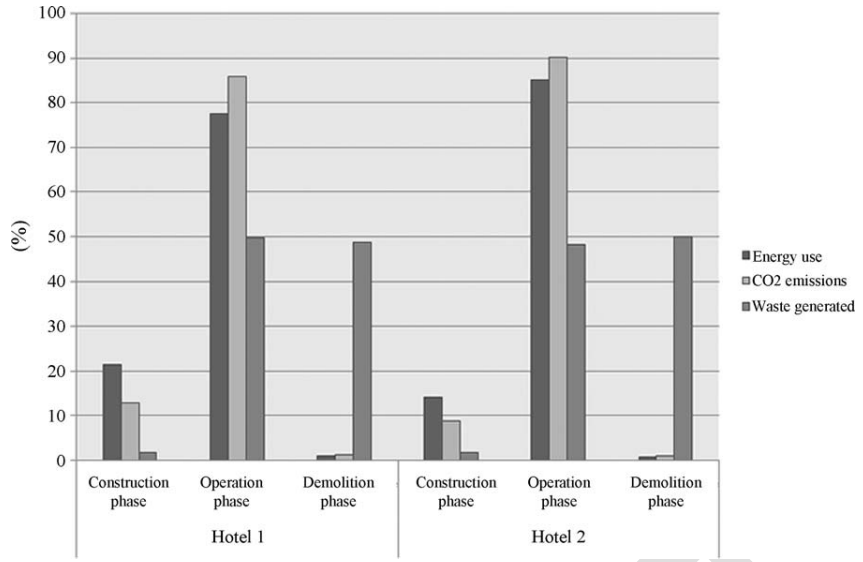


Figure 33: LCA results across the life cycle (source: Beatriz Roselló-Batle et al. (2009))

For the cases analysed, the energy use profile in the 'reforms phase' is not distinctly different to the one obtained for the three phase's case (see Figure 34). The reforms phase only accounts for a 3– 4% of total energy use.

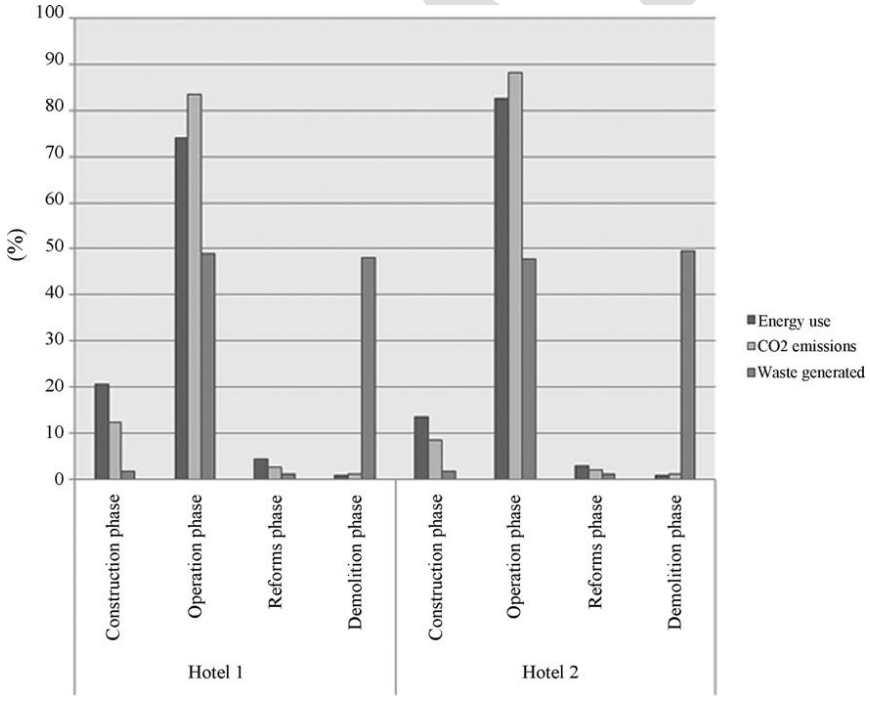


Figure 34: Energy use, CO2 emissions and waste generated. Four phase's case (source: Beatriz Roselló-Batle et al. (2009))

The main conclusions from this article are:

- **Energy use:** Total energy use during the construction phase is the fifth part of the total energy use in the operation phase, assuming a lifetime of 50 years. Near to 97% of energy use comes from construction materials' embodied energy. *Near to 78% of total energy use, during an assumed lifetime of 50 years, comes from the operation phase. It is during this phase where it is possible to achieve the biggest*

reductions in energy use, through ensuring a higher application of renewable energies and energy efficiency measures.

- **CO2 emissions:** In the operations phase, a 20% input of renewable energy can result in a reduction of 45% of the CO_2 emissions in the operation phase.
- **Waste production:** Finally, *the highest generation of waste products occurs in the operation and the demolition phase*. This magnitude of waste produced is near to 1000 kg/m^2 in both phases. *At this point it would be necessary to analyse if waste management and recycling practices are carried out in the best way*. Organic, solid waste represents 79.9% of the total. Glass, paper and cardboard represent 12.9% and 6% of the total, respectively. Plastics and dangerous waste represent only 1% of the total. Some actions, like *domestic solid waste composting can significantly contribute to the reduction of waste in a hotel* – this is typically easy to install and the necessary investment is low.

Results from the study by Filimonau V. et al. (2011):

This study is aimed at analysing the energy consumption and GHG emissions associated with the operational phase of the life cycle of two hotels in UK. The results show that electricity consumption represents the largest energy demand and source of GHG emissions in both hotels (73% of operational and 42% of total, in hotel 1; 65% of operational and 38% of total, in hotel 2) (Table 26).

Table 26 : Total energy requirements and consequent GHG emissions in hotels 1 and 2 (Filimonau et al 2011)

Categories of energy use with associated GHG emissions	Hotel 1				Hotel 2			
	Total annual		On a per '1 guest night' stay basis		Total annual		On a per '1 guest night' stay basis	
	kWh	CO_2-eq. (kg)	kWh	CO_2-eq. (kg)	kWh	CO_2-eq. (kg)	kWh	CO_2-eq. (kg)
Hotel building - operational								
Electricity	495000	287000	11.1	6.4	200000	116000	5.1	2.9
Hot water production	184800	48000	4.1	1.1	240000	62000	6.1	1.6
Operational - Subtotal	679800	335000	15.2	7.5	440000	178000	11.2	4.5
Hotel building — non-operational, 15% of operational	101970	50250	2.3	1.1	66000	26700	1.7	0.7
Hotel building - Subtotal	781770	385250	17.5	8.6	506000	204700	12.9	5.2
Catering services (breakfast)	223380	57400	5	1.3	98458	25300	5	1.3
Laundry services	180000	105000	3	1.75	135000	78400	3	1.75
Hotel TOTAL:	1185150	547650	25.5	11.65	739458	308400	20.9	8.25

The analysis also suggests that catering and laundry services make a significant contribution to the overall energy consumption and consequent GHG emissions of hotels (up to 30-40%). Therefore the authors advise the evaluation of the contribution of these services, whenever possible. To achieve this, the installation of energy meters in hotels and continuous monitoring are recommended.

The authors also conclude that the hotels reviewed have very individual characteristics in terms of occupancy, size, operational activities and energy use, Therefore, the results of this study cannot be directly applied for comparative research in other hotels with different properties.

4.3.5 Summary of key environmental issues identified by the LCA and further studies

Camillo De C. et al (2010a):

- The author distinguishes two main subsystems: Passenger transportation and Accommodation Services. LCA implementation has mainly identified the following processes as crucial points of the system: energy production (power and thermal energy) for hotel and related services, petrol and diesel car transport, air transport, and some disposal processes in landfill.
- The transport system has a higher impact than accommodation services in the acidification (AP) and abiotic depletion (ADP) categories. Accommodation services have a greater effect on ecotoxicity, including human toxicity (HTP) and radioactivity (RAD).
- Focusing on the transport modes used by domestic guests, it emerges that passenger transportations by petrol- and diesel-fuelled cars are the most burdening processes, while air transport is the main environmental issue for passenger transportation from Europe.
- Concerning accommodation, the 'lodging' system is potentially more responsible than 'reception and administration' across all impact categories. Results have shown that energy production (power and thermal energy) and some disposal processes in landfill are the main burdening processes.
- In order to substantially improve the environmental performance of the system analysed, the authors identify some preliminary actions: switching to a supply of energy from renewable sources, implementing energy saving policies, promotion of more environmentally-friendly transport solutions, separate collection of waste (not only in the hall, but also in the hotel rooms), selection of suppliers with a better environmental performance and provision of more environmentally-sound food for breakfast.
- Specific suggestions to improve the EU Ecolabel have been made:
  - ✓ The criteria on energy should include further provisions for where there is "*no access to a market that offers electricity generated from renewable energy sources*" - including the potential for tourist sites to generate their own energy
  - ✓ Guest transportation (from home to home), could include more effective actions to promote the most environmentally-sound forms of transport, as well as to discourage the most polluting ones.

Beatriz Roselló-Batle et al. (2009):

- This study considered three to four phases of tourist accommodation, and revealed that the operating phase is responsible for the greatest environmental impacts of the whole building.
- Concerning energy use, near to 78% of the total energy use during an assumed lifetime of 50 years, comes from the operation phase. It is during this phase where it is possible to achieve the biggest reductions in energy use.
- A 20% contribution from renewable energy lead to a reduction of 45% of the CO_2 emissions in the operation phase.
- Finally, concerning waste generation, the biggest generation of waste products occurs during both the operation and the demolition phase. Organic solid waste represents 79.9% of the total. The introduction of domestic solid waste composting would contribute to a reduction is quantity of waste produced in this hotel. It is a simple activity and the necessary investment is low.

Castellani V. and Sala S. (2012):

- The results of this study suggest that a positive impact might be accomplished by the contribution of separate waste collection and the use of thermal water.

- It is also relevant that in two case studies, the electricity consumption is the main environmental impact. Gas consumption in the restaurant and the transportation of food from the retailer to the hotel are also identified as hotspots related to food preparation.
- The construction of the hotel results in an important impact, due to the transportation of construction materials.
- The impact on respiratory inorganics is 68.5% due to electricity consumption, and 22.4% to the hotel assembly. In addition, the contribution to climate change comes mainly from electricity consumption (69.4%), hotel assembly (16.9%) and from the transportation of food from the retailer to the hotel (10.8%).
- Fossil fuel impact is due to electricity consumption (59.8%), gas consumption related to the restaurant (19.6%) and to the assembly of the hotel (19.6%); mainly for the transportation of construction materials.

Filimonau V. et al. (2011):

- The results of this study show that electricity consumption represents the largest energy demand and source of GHG emissions in both of the hotels analysed.
- The study also suggests that catering and laundry services might become a significant contribution to the overall energy consumption and consequent GHG emissions of hotels (up to 30-40%).
- The authors advise the installation of energy meters in hotels and continuous monitoring, as a tool to better identify previously hidden energy consumption sources.

Overall, the main environmental aspects identified in the LCA review match with the hot-spots described in the best environmental management practice report (BEMP). Importantly, both the LCA review and the BEMP report highlight electricity consumption during the operating phase as the major environmental impact of tourist accommodation. However, it should be noted that a number of the studies placed a high importance on the impacts of transport (primarily to and from the hotel, but also due to excursions) and provision of services (e.g. catering and laundry) suppliers. The BEMP document is being used as a reference to update the criteria. Nevertheless all aspects raised by the LCA review will be considered for the criteria update and will be outlined in the Technical Report.

4.4 Comparison of EU Ecolabel and alternative eco-labels

As outlined in section 2.10, there are a number of eco-labels which provide certification for tourist accommodation, including the EU Ecolabel. The criteria for many of these other tourist-related certification schemes are similar to that of the EU Ecolabel. This is partly because many of these schemes, including Travelife and the Green Tourism Business Scheme (GTBS), are based on EU Ecolabel criteria. However, in undergoing a revision of the EU Ecolabel for tourist accommodation it is important to compare these labels to ensure there is a degree of synchronicity; in particular to ensure that the EU Ecolabel focuses on relevant key environmental aspects (including: energy, water, waste, chemical use etc.) that have also been identified as significant in other eco-labels.

The table below provides an overview of each of the environmental aspects defined in the eco-labels identified in section 2.10. These are compared with the current EU Ecolabel criteria for TAS and CSS to identify any significant differences between the labels. The method of awarding certification (e.g. via a points based system) is also outlined for each eco-label. A more detailed comparison of these labels can be found in Annex II.

Table 27: Comparison (summary) of the main environmental aspects identified in alternative eco-tourism labels – including a comparison to the EU Ecolabel

Eco-label	Environmental aspects referred to*	Significant differences with EU Ecolabel
The Nordic Swan	• Energy consumption • Water consumption • Chemical products use • Waste management • Environmental/General management (including: implementation of an environmental scheme programme; provision of information to guests and staff about the Nordic Swan) • Food options including organic, Fairtrade and/or local. • Management of outside areas	• Includes limit values for energy use, waste production, chemical use and water use. • Specific criterion are outlined for those hotels with conference facilities, including optional points for provision of environmentally friendly flipcharts and pens • Water management in swimming pools • Criterion is in place to ensure that staff are made aware of the EU Ecolabel
The Austrian Ecolabel (Das Österreichische Umweltzeichen)	• Energy consumption • Water consumption • Chemical products use • Waste management • Other services, including: offering local or organic food, reducing the use of disposable products, banning smoking in guest areas. • General/environmental management including: development of an environmental management scheme; provision of information to guests and staff about the label	• Social elements include: ensuring equal opportunities in employment (e.g. no gender discrimination); using elements of local art, architecture, cultural heritage in building design or in shops • Arranging eco-friendly excursions for guests • Total smoking ban in common areas. • Specific criteria for conference paper; must be Type-1 Ecolabelled or 100% recycled or totally chlorine free • Rooms adapted for physically disabled should be offered • Vegetarian food should be available

Eco-label	Environmental aspects referred to*	Significant differences with EU Ecolabel
Green Key	• Energy consumption • Water consumption • Waste management • Chemical products use • Environmental management, including: operating an environmental management system; and keeping guests informed about the green key	*No major differences.*
Travelife Sustainability Criteria	• Energy consumption • Water consumption • Waste management • Chemical products use • Other services and general management, including social criteria, provision of information to guests, staff training, operating an environmental management system.	• Social criteria (many of which are mandatory), focusing on: fair treatment of staff (including employment policy); engagement with the local community, including encouragement of charitable donations/programmes • Additional points are awarded for membership of social/ethical associations, community forums and sustainable programmes. • Includes some quality aspect, through collection of guest feedback

Eco-label	Environmental aspects referred to*	Significant differences with EU Ecolabel
Green Tourism Business Scheme (GTBS)	• Energy consumption • Water consumption • Waste management • Chemical products use • Points are awarded for other services such as: monitoring of flora/fauna on site, providing information to guests regarding public transportation • Points are awarded for other general management initiatives such as establishing a green action plan to include staff training	• Points are awarded for reducing the impact of staff transportation (i.e. travel to work) and for involvement in a green related social group/association. • Encourage offering of a Green Events Package. • Some element of quality criteria is included (through engagement with guests).
Global Sustainable Tourism Criteria (GSTC) for 'Hotels and Tour Operators'	• Energy consumption • Water consumption • Waste management • Chemical products use • Offering of other services, such as promotion of sustainable transport. • General management includes	• Employment and social criteria include: equal opportunity for employment, offering regular training to all staff and ensuring that all staff have experience and opportunities for advancement; and maximizing social and economic benefits to the local community (e.g. supporting local businesses and residents) • Maximize benefits to cultural heritage and minimize negative impacts (e.g. contributing to the protection on local heritage sites)

Eco-label	Environmental aspects referred to*	Significant differences with EU Ecolabel

Ecolabel Malta	• Energy consumption
	• Water consumption
	• Waste management
	• Chemical products use
	• Other services, including: purchase of ecologically sustainable goods and local products.
	• General management criteria, including: implementation or practices to reduce, pollution, water run-off, erosion etc.
		• Support local communities and engage in social development.
		• Environmental protection of local area including eco-system.
		• Some reference to quality criteria via guest feedback
		• Additional swimming pool criterion:
		  ○ Mandatory - chlorine levels checked daily.
		  ○ Voluntary - frequent check of pool levels i.e. to avoid leakages.

Green Globe	• Energy consumption • Water consumption • Waste management • Chemical products use • Purchase of local consumables. • General management criteria, including: establishing an environmental management system, training employees	• Respect, support and protect the local community, eco-system, local businesses, and provide employment for local residents. Preserve history and incorporate culture. • Reduce/offset GHG emissions • Encourage sustainable construction of buildings.
Green Seal (this is awarded in addition to achieving the Green Globe label) – gold, silver and bronze awards can be given	• Energy consumption • Water consumption • Waste management • Chemical products use	• Focus on retrofitting building to ensure water and energy efficiency • Implementing a waste reduction programme, including re-use (donation) of food.

* This is a brief summary only – more detailed information about the criterion of each labels can be found in Annex II

4.4.1 Comparison of EU Ecolabel and alternative eco-labels

The majority of alternative eco-labels consist of broadly similar criteria to that of the EU Ecolabel. Importantly, each label contains a number of criteria which focus on energy consumption, water consumption, waste management and chemical product use (e.g. detergents, disinfectants, pesticides) – these same areas are the focus of the EU Ecolabel. In addition, the majority of labels also include criteria for other services (e.g. provision of local foods, providing information about public transport) and for general management (including operating to an environmental management plan, training employees). Again, many of these criteria reflect the EU Ecolabel.

There are, however, a few significant differences between the EU Ecolabel criteria and other eco-labels. Factors which are included in other labels, but not in the EU Ecolabel, include:

- Social aspects (e.g. employment factors and engagement with/support of local communities) and quality aspects (e.g. engaging with guests to ensure they are receiving a quality service). These issues represent the biggest difference between the EU Ecolabel and other, similar labels. Therefore, further analysis of social and quality criteria have been carried out in Section 4.5.
- Swimming pool water criterion (e.g. aiming to reduce swimming pool water consumption, including activities such as regularly checking for leakages). Although the EU Ecolabel currently included criteria relating to swimming pool use, there is little regarding water management. More information about this can be found in Section 4.2.1.
- Ensuring staff are aware of the label through training – this is not specifically outlined in the EU Ecolabel, although there is an existing staff training criterion.
- Reference to conference facilities, including criteria for the use of 'green' conference notepads, paper etc. The GTBS also included criterion to encourage accommodation to offer 'green event packages'. Conference facilities are not specifically mentioned in the EU Ecolabel, although (as outlined in Section 2.8), this was also commented on in the stakeholder questionnaire – an updated scope for tourist accommodation should consider this.
- It should also be noted that the Nordic Swan includes Limit values – one label does this, but it only for the Nordic regions so can be based on localised climate data etc – not feasible for European (or global) labels.

4.5 Social and quality updates

During consultation with CBs, suggestions were made to develop new criteria. It was suggested that criteria on the social and quality aspects of tourist accommodation be added, as these are significant issues in the tourism sector. A number of alternative eco-labels also include more detailed social and - to a more limited extent - quality criterion. The following sections outline the rationale for including these criteria and make proposals as to how the updated EU Ecolabel for tourist accommodation can incorporate these.

4.5.1 Social criteria

Although the EU Ecolabel is predominantly concerned with environmental issues, the EU Ecolabel Regulation 66/2010 which governs the scheme does allow social aspects to be considered, where they are relevant. Discussions on the feasibility of including these aspects in the criteria are ongoing, although experience from the revision of criteria for other product groups (e.g. textiles) and from the work of the 'horizontal' working group on social criteria indicates that social criteria are difficult to develop.

Social aspects, specifically employment practices and the treatment of local residents are, however, particularly important in the tourism sector. This is also a sector where the social impacts can be very visible to consumers, unlike in other industries where the greatest impacts can occur elsewhere in the supply chain. A 'sustainable tourism' market has been built around this, promoting customer awareness of the social implications of tourism and highlighting ways in which tourist accommodation can have a positive, rather than a negative, impact on employees and local communities.

In response to this, the UN World Tourism Organisation (UNWTO) has developed a standardised Global Code of Ethics for tourism; tourist accommodation sites and other relevant organisations are encouraged to implement this in order to maximise tourism's socio-economic contribution while minimizing its possible negative impacts on the environment, cultural heritage and societies [UNWTO, (n.d.)]. Adherence to the Code is voluntary, but a number of leading travel and tourism organisations (including: TUI; Thomas Cook; large hotel groups such as Marriott and Accor Group; and associations including the European Travel Agents' and Tour Operators Associations, ECTAA) have signed up to this in recognition of the importance of these issues in tourism. The Code recognises the following:

Article 1: Tourisms contribution to mutual understanding and respect between peoples and societies.
Article 2: Tourism as a vehicle for individual and collective fulfilment.
Article 3: Tourism, a factor of sustainable development.
Article 4: Tourism, a user of the cultural heritage of mankind and contributor to its enhancement.
Article 5: Tourism, a beneficial activity for host countries and communities.
Article 6: Obligations of stakeholders in tourism development.
Article 7: Right to tourism.
Article 8: Liberty of tourist movements.
Article 9: Rights of workers and entrepreneurs in the tourism industry.
Article 10: Implementation of the principles of the Global Code of Ethics for Tourism.
Below is a summary of various relevant sources used to inform the decision about the feasibility of adding social criteria to the EU Ecolabel for tourist accommodation.

Stakeholder feedback:
The survey of stakeholders in the tourist accommodation industry requested feedback on the demand for inclusion of social criteria in the existing EU Ecolabel for TAS and CSS. Overall, responses were mixed, as shown in Table 28 below.

Table 28: Responses from stakeholder questionnaire

	Yes	No
Do you think the revised criteria for the EU Ecolabel for tourist accommodation and camp site services should include additional social criteria?	37	39

Source: Oakdene Hollins, analysis of stakeholder review.
Note: the remainder of respondent answered 'don't know' or did not respond.

Where there was support of social criteria, the common suggestions for inclusion in the EU Ecolabel criterion included:

1. Ensuring proper employment practices
    - ensuring quality and diversity in the recruitment process
    - basic CSR issues
    - ensuring proper working conditions
    - ensuring no worker exploitation (including children)
    - providing proper staff training
    - encouraging local employment
    - provision of appropriate pay and benefits.

2. Promoting local goods and services
    - encouraging local procurement
    - creating local partnerships.

3. Educating guests
    - informing guests about local culture, language and arts.

4. Ensuring accessibility
    - free or discounted stays for charitable associations
    - ensuring accessibility for all guests (e.g. disabled access).

5. Community involvement
    - activities with elderly, handicapped children or funding of local projects/ good causes.
    - encouraging involvement in local activities and social initiatives.

6. Others
    - ensuring good animal welfare practices
    - encouraging school visits, charity events or funding local projects/good causes
    - management of local landscapes to comply with local conditions.

Alternative environmental labels:

A review has been carried out of alternative environmental labels, available in the EU, which are awarded to tourist accommodation. Table 29 shows that a number of labels include social criteria.

Table 29: comparison of alternative environmental labels, including social criteria

Criteria	Nordic Swan	Austrian Ecolabel	Malta Eco	Green Key	Travelife	Green Tourism Business Scheme	Global Sustainable Tourism Criteria	EU Ecolabel
Cultural impact		✓	✓		✓	✓	✓	
Fair employment practices (above legal requirements)					✓		✓	

A review of the social aspects of the labels, identified above, has highlighted a number of similarities between them; these are the social issues which the majority of labels cover, and so are assumed to be the most significant. These include:

1. **Criteria focusing on employment of staff within the tourist accommodation**, such as:

- ensuring equal employment opportunities (e.g. for women); examples include:

GSTC criteria (mandatory)
The organization offers equal employment opportunities to women, local minorities and others, including in management positions, while restraining child labour.

- restricting child labour and commercial exploitation, including sexual exploitation; examples include:

Green globe (mandatory)
The business has implemented a policy against commercial exploitation, particularly of children and adolescents, including sexual exploitation.

- ensuring fair employment practices, including:
  - providing at least a living wage
  - ensuring working hours comply with an industry/national standard
  - allowing employees freedom to enter and leave employment. Examples include:

GSTC (mandatory)
The international or national legal protection of employees is respected, and employees are paid at least a living wage.
Travelife (mandatory)
Do working hours comply with national or international law or benchmark industry standards, whichever affords employees most protection?
Travelife (mandatory)
Are employees free to: enter their employment through their own choice / leave their employment when they choose without penalty?

It should be recognised that criteria relating to employment, as above, are typically mandatory.

2. **Criteria focusing on the cultural impact that tourist accommodation may have** on the surrounding environment, and on local people, such as:

- ensuring the tourist accommodation supports local business and incorporates culture and local heritage into the building design and services offered (e.g. using local art); examples include:

  GSTC (mandatory)
  The organization incorporates elements of local art, architecture, or cultural heritage in its operations, design, decoration, food, or shops; while respecting the intellectual property rights of local communities.
  Travelife (optional)
  Does the business actively choose local suppliers of goods and services (can be answered yes even if some of their products are imported)?
  Does the business promote local products and services to guests, by recommending guides, restaurants, market, craft centres?

- providing guests with a code of behaviour (e.g. dress codes); examples include:

  Travelife (optional)
  Does the business provide customers guidance on appropriate behaviour and protocols outside the hotel (e.g. nude bathing, dress codes, local regulations regarding alcohol consumption).
  Green Globe (mandatory)
  A code of conduct for activities in local communities has been developed, with the consent of and in collaboration with the community.

- protecting local sites and ensuring that the tourist accommodation does not restrict locals' access to land and required resources or damage local culture; examples include:

  Green Globe (mandatory)
  The business contributes to the protection of local historical, archaeological, culturally, and spiritually important properties and sites, and does not impede access to them by local residents.
  Travelife (optional)
  Indigenous people are invited to be involved in any communications about their culture.

- supporting local infrastructure/community development (e.g. sponsoring local building of schools) and protection and conservation of historically or culturally important sites; examples include:

  GSTC (mandatory)
  Historical and archaeological artefacts are not sold, traded or displayed, except as permitted by local or international law.
  GSTB (optional)
  Business is actively involved in local social community projects.

Business participates in visitor payback schemes with the proceeds going to local 'green' projects, or has a collection box for green related charities.

It should be noted that the criteria relating to the wider social impacts (i.e. those not related to direct employment) are more often not mandatory, but are awarded additional points by the tourism scheme.

This points towards a distinction in social criteria across labels; those criteria related to aspects directly within the hotel (i.e. employment) and those broader aspects which focus outside of the tourist accommodation (i.e. impacts on local communities).

Reference to social issues in EU Ecolabel criteria:

As the EU Ecolabel is an environmental label, social issues are generally out of scope except where particularly relevant as per the EU Ecolabel Regulation 66/2010. In the recent revision of the EU Ecolabel criteria for textiles it was recognised that, in the textiles industry, labour issues are an important consideration. The textiles industry is often under scrutiny for poor employment practices in developing countries; for example, there has been recent widespread media coverage of a string of garment factory accidents. Notably, the collapse of the Rana Plaza building which housed several clothing factories in Savar, Bangladesh; the building collapse killed at least 386 workers and highlighted the often poor working practices and safety precautions taken in manufacturing for the textiles industry [Time (2013)]. Many leading brands have therefore been working on ways to eradicate these risks across their supply chains for many years – in some cases decades - with a particular focus on removing child labour, poor conditions and excessive overtime in supplier factories.

Recognising the importance of these aspects in textile manufacture, the EU Ecolabel has incorporated the following as part of the textiles criteria (Note: these criteria have yet to be confirmed):

Criteria: *Applicants shall ensure that the fundamental principles and rights at work as described in the International Labour Organisation's (ILO) Core Labour Standards, the UN Global Compact and the OECD Guidelines for Multi-National Enterprises shall be observed by all cut/make/trim production sites used to manufacture the licensed product(s). For the purpose of verification the following ILO Core Labour Standards shall be referred to:*

029 Forced Labour
087 Freedom of Association and Protection of the Right to Organise
098 Right to Organise and Collective Bargaining
100 Equal remuneration
105 Abolition of Forced Labour
111 Discrimination (Employment and Occupation)
155 Occupational safety and health
138 Minimum Age Convention
182 Elimination of the Worst Forms of Child Labour

These standards shall be communicated to cut/make/trim production sites used to manufacture the final product.

Assessment and verification: *the applicant shall demonstrate third party verification of compliance, using independent verification or documentary evidence, including site visits by auditors, for all cut/make/trim production sites in the supply chain for their licensed products. This shall take place upon application and subsequently during the license period if new production sites are introduced.*

The International Labour Organisation (ILO) brings together governments, employees and workers to set labour standards, policies and programmes. Importantly, the ILO is a good source for best practice employment practices. The provision of fair labour conditions is of great significance to the tourist industry. It may be appropriate, therefore, to take a similar approach to that of textiles in incorporating social criteria into the EU Ecolabel tourist accommodation revision; existing ILO standards which represent best practice could be included as additional criteria.

Conclusion:

Social criteria can span many aspects of tourism services, although it is the labour aspects (i.e. employment practices) which are under the direct control of the tourist accommodation. Employment criteria are also prevalent as mandatory elements of a number of tourism eco-labels.

There is therefore scope for the EU Ecolabel to include criteria which relate directly to employment of staff i.e. the social issues which are wholly under the control of the tourist accommodation.

Listed below are two of the current EU Ecolabel criteria for TAS and CSS which relate in some way to the social criteria outlined in other labels:

Criterion 82: Environmental communication and education (up to 3 points)
The tourist accommodation shall provide environmental communication and education notices on local biodiversity, landscape and nature conservation measures to guests (1.5 points). Guest entertainment includes elements of environmental education (1.5 points). *Assessment and verification: The applicant shall provide a detailed explanation of how the tourist accommodation fulfils this criterion, together with appropriate supporting documentation.*

Criterion 90: Local food products (up to 3 points)
At least two locally sourced and not out of season (for fresh fruit and vegetables) food products shall be offered at each meal including breakfast (1.5 points). Where applicable, consumption of local endangered species such as specific fish and crustacean species and 'bushmeat' and shrimps from mangrove forest endangering cultivation shall be forbidden (1.5 points). *Assessment and verification: The applicant shall provide a detailed explanation of how the tourist accommodation fulfils this criterion, together with appropriate supporting documentation.*

These criteria are both optional; and so award points where tourist accommodation sites meet these requirements. Throughout the technical analysis of these current EU Ecolabel criteria, these should be considered. There may be a possibility to update or extent these criteria to bring them further into line with other eco-labels and stakeholder feedback.

4.5.2 Quality criteria

For a service, such as tourist accommodation, the quality of the service provided is one of the main ways a business can distinguish itself in a highly competitive market. There are a number of well-established methods for measuring the quality of tourist accommodation; ranging from formal award for meeting a specific quality standard (e.g. star ratings) to informal feedback from guests, often in the form of online ratings - for example through sites such as TripAdvisor (details of TripAdvisor are available at: http://www.tripadvisor.co.uk/).

The EU Ecolabel does not currently include any specific reference to the quality of the offering of a tourist accommodation site. Below is a summary of various relevant sources used to inform the decision about the feasibility of adding quality criteria to the EU Ecolabel for tourist accommodation.

Stakeholder feedback:

The survey of stakeholders provided mixed feedback on the demand for inclusion of quality criteria in the EU Ecolabel for tourist accommodation, as shown in Table 30 below.

Table 30: Responses from stakeholder questionnaire

	Yes	No
Do you think the revised criteria for the EU Ecolabel for tourist accommodation and camp site services should include criteria regarding the quality aspects of the accommodation?	37	40

Source: Oakdene Hollins, analysis of stakeholder review.
Note: the remainder of respondent answered 'don't know' or did not respond.

Stakeholders also provided some feedback on how quality is currently measured in tourist accommodation. The following approaches were taken:

1. Most commonly, quality in tourist accommodation is measured through star ratings. However, there are a number of different star rating schemes available across Europe (more information of star rating is provided in the *Quality Standards* section below).

2. Several respondents mentioned the use of ISO 9001 in ensuring quality. ISO 9001 is an international standard for a Quality Management System. Compliance with this standard means that a hotel must:

- demonstrate its ability to consistently meet customer and applicable regulatory requirements and
- aim to enhance customer satisfaction through the effective application of its management system, including working towards continuous improvement of the system and ensuring ongoing conformity to customer requirements and relevant regulations [International Organization for Standardization – ISO 9001, (2008)].

3. A number of tourist accommodation sites use customer feedback to help improve the quality of any services provided.

4. Several hotels stated that they are regularly audited against quality aspects as part of a hotel chain, in order to maintain a consistent standard across a brand.

Alternative environmental labels

Table 31 below provides a comparison of environmental labels applicable to tourist accommodation and highlights that fitness for use/quality of service criteria are not widely used.

Table 31: Comparison of alternative environmental labels, including quality criteria

Criteria	Nordic Swan	Austrian Ecolabel	Malta Eco	Green Key	Travelife	Green Tourism Business Scheme	Global Sustainable Tourism Criteria	EU Ecolabel
Fitness for use/ quality of service			✓		✓		✓	

Only a few environmental labels make a direct reference to the more general quality aspects of tourist accommodation. The GSTC requires that:

Customer satisfaction, including sustainability aspects, is measured and corrective action is taken as appropriate – A complaint system is in place which records customer complaints and corrective actions.
GUIDANCE: Best practice is to have proactive customer satisfaction surveys/interviews with analysis and corrective action/improvement programs.

This criterion is mirrored by Malta's Eco-label and the Travelife criteria. However, many other labels, including the EU Ecolabel, do require that a certain amount of feedback is collected from customers; currently the criterion only states that this customer feedback is only collected in relation to environmental aspects, not the more general quality aspects of the hotel.

It is therefore important to note that none of the environmental labels reviewed specifically assesses quality criteria, other than requiring the collection of guest feedback.

Quality standards:

A wide variety of ratings or classifications have been developed to provide users (or guests) with a comparative indication of quality levels between tourist accommodation sites. Most quality schemes involve some grading scale, often based on stars. For example, the AA operates a scheme for awarding quality ratings to hotels, guest houses, self-catering lodging or camping parks across the UK. This rating is consumer facing, and allows guest to determine what level of 'quality' they might expect from the accommodation [AA Hotel Services (2011)].
Often, quality rating schemes (including the AA scheme) have been harmonised at a national level at least, meaning that two '3 star' rated hotels in the same country should have the

same quality level. However, there are a number of examples where European-wide quality schemes have been developed, including:

The European quality standard for campsites (EuQSCS) [EEIG, (2004)]. This quality standard was developed by the European Economic Chamber of Trade, Commerce and Industry. It outlines what can be considered best practice in terms of quality for a campsite and includes checklists for: the environment and position of the site; the availability of staff and reception opening times; the size of accommodation; equipment provided for each camping lot; the facilities offered including leisure activities, cooking facilities and washroom facilities.

The EEIG EU Hotel Standard Quality Seal [EEIG, (2012)]. This standard was also developed by the European Economic Chamber of Trade, Commerce and Industry, and aims to encourage all tourist accommodation businesses across Europe to achieve agreed EU standards in operations, management and user experience. This standard awards a 1-5 star rating, depending on the quality of the facilities and services available. Importantly, the standard also highlights the importance of organisations being at least certified to ISO9001 or equivalent.

The European Hospitality Quality scheme (EHQ scheme) is a service quality scheme, developed and managed by HOTREC (the European Umbrella organisations for national associations representing hotels, restaurants, cafes and similar organisations). The purpose of this quality scheme is to provide a European wide reference model for national and regional quality schemes in tourist accommodation. This European scheme is not intended to replace the many existing quality schemes at national and regional levels, but it does propose a system for evaluating and comparing them.

These quality standards typically look at two aspects:

1. The quality or number of *facilities* offered by tourist accommodation, ranging from the quality of the furniture, to the range of guest entertainment provided; examples include:

EEIG – hotel

- Buildings with more than three floors (3 star hotel) must have an elevator.
- Sufficient number of coat hangers (not made of wire); a fireproof paper basket; information on hotel and surroundings (2 star hotel).

AA quality standard – hotel

- 100% of bedrooms with en suite or private facilities (1 Star hotel).
- A cooked or continental breakfast provided in a designated eating area on the premises and advertised as such. (1 - 2 star hotel).
- Digital TV available in all bedrooms. (1 - 2 star hotel).

EuQSCS (optional criteria/for additional points) - campsite

- Delivery of fresh bread, fruits, vegetables etc.
- Equipment for camping lot (including number of chairs, benches, clothes lines etc.)
- Quality and range of household equipment (including cooking equipment, kitchen appliances, cutlery and crockery).

2. The quality of the *service* offered, such as the availability and helpfulness of reception staff, examples include:

AA quality standard - hotel

Proprietor and/or staff available during the day and evening to receive guests and provide information/ services such as hot drinks and light refreshments. (1 star hotel).
(1 - 2 star hotel):

- Direct guest contact given priority over other reception duties. Proprietor or staff available to receive guests and provide information/services from just before breakfast to late evening at approximately 10 pm.
- Receptionist's attention possibly summoned by a bell or telephone.
- Guests clearly directed to their room and given a brief explanation of location of hotel facilities.

EuQSCS (optional criteria/for additional points) - campsite

- Daily opening hours of the reception
- Daily opening hours of the restaurant/café.

Although both types of criteria will impact on the experience of the customer, it is important to recognise that criteria focusing on facilities may exclude a large number of tourist accommodation sites. For example, under the EEIG standards, a hotel without a lift but with more than three floors will not be able to achieve higher than a 2 star rating. This needs to be considered when reviewing the EU Ecolabel criteria – especially as the criteria will cover a wide range of tourist accommodation including large hotels and smaller camp sites. Specifying that an EU Ecolabelled tourist accommodation site needs to offer specific facilities (e.g. a swimming pool or digital TV) or should reach a certain number of stars will instantly exclude a number of sites. In addition, each star rating system is different in terms of the criteria it specifies; hotels across the world use different rating systems and so finding a common set of criteria which can be used as a means of identifying best practice in terms of hotel quality is not feasible.

It is therefore clear that linking the EU Ecolabel to star ratings is not possible, due to the plethora of rating systems and the strict requirements that these place on tourist accommodation.

Conclusion:

A number of tourist eco-labels include criteria related to collection and analysis of feedback from guests. Collecting customer feedback ensures that a tourist accommodation site considers the quality aspects of its offerings and makes changes as a result of customer demands, but does not place any restrictions on tourist accommodation based on the facilities available (e.g. a lift, a swimming pool or a specific amount of furniture). Including a similar criterion in the EU Ecolabel for tourist accommodation will bring this into line with other labels. It also does not conflict in any way with the various different star ratings and other quality rating systems which are already widely used by tourist accommodations.

Listed below is the current EU Ecolabel criterion for TAS and CSS which relates specifically to collecting feedback – regarding environmental aspects of the accommodation - from guests:

Criterion 27. Information to guests (mandatory)

The tourist accommodation shall provide information to the guests, including conference participants, on its environmental policy, including safety and fire safety aspects, inviting them to contribute to its implementation. The information conveyed to the guests shall refer to the actions taken on behalf of its environmental policy and provide information about the Community eco-label. This information shall be actively given to the guests at the reception, together with a questionnaire covering their views about the environmental aspects of the tourist accommodation. Notices inviting guests to support the environmental objectives shall be visible to the guests, especially in the common areas and the rooms.
Specific actions for the different areas shall be:

Concerning **energy**:
— Where applicable, according to criteria 7 and 8, inform guests on switching off heating/air conditioning and lights.

Concerning **water and waste water**:
— In the bathrooms there shall be adequate information to the guest on how to help the tourist accommodation to save water,
— The guest shall be invited to inform the staff of any leak,
— In the toilets, signs shall request guests to dispose of their waste into the waste bins instead of the toilets.

Concerning **waste:**
— The guest shall be informed about the waste reduction policy of the tourist accommodation and the use of quality product alternatives to disposable and single portion products, and should be encouraged to use non-disposable products, in case where any legislation requires the use of disposable products,
— They shall be informed how and where they can separate waste according to local or national systems within the areas belonging to the tourist accommodation and where to dispose of their hazardous substances.

Assessment and verification: The applicant shall provide a declaration of compliance with this criterion, together with copies of the information signs and notices provided for the guests, and indicate its procedures for distributing and collecting the information and the questionnaire, and for taking the feedback into account.

This criterion is mandatory; and all tourist accommodation sites must meet these requirements. However, throughout the technical analysis of this EU Ecolabel criterion, consideration should be made as to whether these requirements can be further updated or revised to further align with other eco-labels and stakeholder feedback – notably, could this criterion better reflect quality aspects of tourist accommodation.

5 Improvement potential (Task 4)

Section summary:

The current EU Ecolabel for TAS and CSS reflects the following key environmental impacts:

- Energy use
- Water use
- Waste production
- Detergents and disinfectants use
- Other services (e.g. food service and access to public transport)
- General management (e.g. staff training/establishing environmental targets)

Analysis of alternative eco-labels, BEMP and LCA reviews has shown that these are the main impacts to consider for tourist accommodation, i.e. no new environmental impacts have been identified since the last revision of TAS and CSS criteria.

However, a number of the existing EU Ecolabel criteria will need to be revised or updated. In some cases, new criteria may need to be added to fill gaps which have been identified in the Market analysis (Task 2) and the Technical analysis (Task 3) of this report. Any changes to the current criteria set will have an impact on both the tourist accommodation site and its environmental impact. The following key improvements have been identified (further updates will be outlined in a Technical Report):

Energy use: the main update will be as a result of regulatory changes. This will, for example, encourage all tourist accommodation sites to operate only the most energy efficient equipment.

Water use: it is proposed that a criterion is added which encourages proper management of the swimming pool backwashing process, in order to reduce water wastage. This will increase the water efficiency of any tourist accommodation site operating a swimming pool

Waste production: it is proposed that existing criteria are updated to better reflect the waste hierarchy, i.e. waste prevention over waste management.

Social issues: it is proposed that a further social criterion is added, to align the EU Ecolabel with alternative eco-labels. This will ensure that all tourist accommodation sites are operating to best practice employment principles. Current criterion can also be updated to further encourage purchasing of local goods – encouraging community engagement and helping to develop local economies

Quality issues: it is proposed that the EU Ecolabel criterion is updated to encourage guest feedback on the quality aspects of the tourist accommodation, not only environmental aspects. This will act to both bring the EU Ecolabel into line with other eco-labels, and to encourage improvement in the quality of services offered by EU Ecolabelled tourist accommodation.

5.1 Introduction and aims

The aim of Task 4 (improvement potential) is to evaluate and prioritise improvement options which could inform the revision of the existing EU Ecolabel criteria. Informing this will be the findings of the market and the technical analysis (Task 2 and 3).

These previous sections have helped to identify the environmental 'hot spots' of tourist accommodation, i.e. the main environmental impacts. This task will look at each of these in more detail and focus on how these hotspots should be reflected in the updated EU Ecolabel criteria for tourist accommodation. The assessment will focus on outlining the impact that suggested changes to the criteria might have.

Where relevant, stakeholder feedback on the existing criteria set has also been considered. Further detailed feedback is expected from the Working Groups that will take place as part of the criteria revision process.

The results of this task will be compared with the current sets of criteria in a way which indicates how the improvement potential can be integrated into the revised set of criteria which will be provided in the following "Technical Report" (Task 5).

5.2 Impacts of tourist accommodation

The market analysis (Task 2) and technical analysis (Task 3) outlined in this report, have identified the main impacts of tourist accommodation as:

1. Accommodation: Water consumption.
2. Accommodation: Waste generation.
3. Accommodation: Energy consumption.
4. Kitchens: Food sourcing, organic waste generation, water and energy consumption.
5. Campsites: Guest education, outdoor area management and energy and water consumption.

Importantly, these are all considered in the current EU Ecolabel for TAS and CSS, which included criteria – both mandatory and optional - for:

- Energy use
- Water use
- Waste production
- Detergents and disinfectants use
- Other services (including food service and access to public transport)
- General management (including staff training and establishing environmental targets)

The comparison with alternative eco-labels also showed that, overall, the EU Ecolabel focuses on similar criteria, and no other labels have identified new environmental impacts to consider. Water management of swimming pools was, however, identified as an area where the EU Ecolabel is lacking in comparison to other labels. This will be considered in the criteria revision process.

5.3 Impact of proposed changes to criteria

As a result of the findings from Tasks 2 and 3, the table below identifies the impact of suggested changes to the EU Ecolabel. Where relevant, stakeholder comments have been

included. This reflects key updates only – a subsequent Technical report will provide detail of all additional changes.

Note, the table below refers to both mandatory and optional criterion. The changes to mandatory criteria will have the biggest impact.

Table 32: Impact of proposed changes to EU Ecolabel criteria

Key impact area	Impact of change to criteria	Reference to current criteria
Energy use	Updated due to stakeholder feedback – the introduction of a phase in programme will mean that tourist accommodations' do not need to throw away light bulbs which are still working in order to meet the criterion. However, it will be important to fully update the current EU Ecolabel requirements with any legislative changes. Importantly, the EU adopted Directive 2009/125/EC on Ecodesign and Directive 2010/30/EU on Energy Labelling were introduced. This focuses on integrating environmental aspects into the design of a product. There is reference to energy-using products throughout the EU Ecolabel criteria for TAS and CSS including household appliances such as cookers and refrigerators. It will therefore be important for any tourist accommodation criterion to reflect best practice in terms of energy efficiency and align with the Ecodesign Directive to promote the most efficient products. (More detail on this can be found in Section 2.9). This will have a limited visible impact on the way EU Ecolabelled tourist accommodations currently operate, but will be important to reflect in any revised criterion.	Criterion relating to energy using products
Water use	An analysis of alternative eco-labels and a review of BEMP identified that EU Ecolabel does not currently include a criterion for water management of swimming pools. It is proposed that a new criterion (optional) is added to ensure that the backwashing of swimming pools is managed properly, to ensure water use is minimised. (More detail on the rationale for this proposal can be found in Section 4.2.1). Backwashing can account for a significant 30% of a swimming pools total water use. The introduction of this criterion will have a large overall impact on reducing water usage across all the EU Ecolabelled sites which operate swimming pools.	New criterion to be added
Waste	The waste hierarchy should be followed when considering handling of	Criterion 20:

Key impact area	Impact of change to criteria	Reference to current criteria
production	waste from tourist accommodation. Importantly, this puts an emphasis on waste reduction rather than waste management. The current EU Ecolabel includes a number of criteria which focus on encouraging recycling, composting and re-use. Waste reduction is mostly considered in Criterion 20: disposable products (mandatory), and Criterion 21: breakfast packaging (mandatory). The aim of both of these criterion is to reduce the waste that would typically be produced by single-use, disposable products. It is proposed that these criteria are further updated to restrict the use of disposable products. However, a consideration should be made to the possible conflict with quality ratings (such as star ratings) which may require certain products to be available to all guests. This issue was raised by a number of stakeholders. Criterion 21: breakfast packaging, could also be updated to consider food waste. (More detail on the rationale for this proposal can be found in Section 4.2.2 and Section 4.2.4.1). These criteria should be updated to allow the tourist accommodation to best manage their own waste reduction plans – this change will enable to tourist accommodation to control food waste as well as packaging waste.	disposable products Criterion 21: breakfast packaging
Detergents and disinfectants	No significant new requirements for detergent and disinfectant use have been identified in this report. The EU Ecolabel currently reflects the key environmental impacts of tourist accommodation in this area.	
Social impacts	Stakeholder feedback suggests that social criteria should be further included in the current EU Ecolabel – this will also bring the EU Ecolabel in to line with existing criteria. Importantly, the EU Ecolabel for tourist accommodation does not just apply to sites within Europe; applicant can operate tourist accommodation anywhere in the world. The EU Ecolabel for textiles has set somewhat of a precedent with the inclusion of International Labour Organisation (ILO) best practice requirements for principles and rights in the workplace. It is suggested that this is included as a new criterion in the tourist accommodation EU Ecolabel. Accommodation sites inside the EU should already be conforming to these principles; however, outside of the EU, conformity may be more limited. (More detail on the rationale for this proposal can be found in Section 4.5.1). The addition of this criterion will ensure that labour standards within EU Ecolabelled tourist accommodation conform to best practice. This will also set a 'benchmark' for a standard approach to labour and employment practices in all EU Ecolabelled tourist accommodation sites.	New criterion to be added

Key impact area	Impact of change to criteria	Reference to current criteria
	The importance of purchasing local products was also raised as an issue by stakeholders, and is encouraged by many eco-labels. It is proposed that the current EU Ecolabel Criterion 90: Local food products (optional), is updated to encourage purchase of all 'local products', not just food. (More detail on the rationale for this proposal can be found in Section 4.5.1). Further encouraging the purchase of local good will help to develop local economies and allow the tourist accommodation to engage further with the local community. There are also clear environmental impacts to increasing the purchase of local products, including a reduction in transport and therefore fuel emissions.	Criterion 90: Loc food products
Quality of service	The quality aspect of tourist accommodation is included in a number of alternative eco-labels, although only to a limited extent. It is suggested that Criterion 26: Information to Guests (mandatory) is updated so that the tourist accommodation should ask for feedback on general quality issues, alongside a survey on the environmental aspects of tourist accommodation. (More detail on the rationale for this proposal can be found in Section 4.5.2). This will act to both bring the EU Ecolabel into line with other eco-labels, and to encourage improvement in the quality of services offered by EU Ecolabelled tourist accommodation.	Criterion 26: Information to Guests

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Acronyms

AA	Automobile Association
AHWG	Ad Hoc Working Group
ANPA	Italian Environment Protection Agency
AWC	Annual water consumption
BEMP	Best environmental management practice
CB	Competent Body
CDP	Chemical toilet disposal point
CSR	Corporate social responsibility
CSS	Campsite services
EDEN	European Destinations of Excellence
EEI	Energy Efficiency Index
EEIG EU	Hotel Standard Quality Seal
EMAS	Environmental Management and Audit Scheme
ERDF	European Regional Development Fund
ESF	European Social Fund
EUEB	European Union Ecolabelling Board
EuQSCS	European Quality Standard for Camping Sites
FEE	Foundation for Environmental Education
GCV	Gross calorific value (energy input)
GDP	Gross domestic product
GSTC	Global sustainable tourism council
GTBS	Green Tourism Business Scheme
GWD	Groundwater Directive (2006/118/EC)
GWP	Global Warming Potential
HCMI	Hotel Carbon Measurement Initiative
HDD/CDD	Heating degree day/Cooling degree day
HES	Hotel Energy Solutions
HOTREC	Hotels, Restaurants and Cafes (the European Umbrella organisations for national associations representing hotels, restaurants, cafes and similar organisations)
HVAC	Heating, ventilation and air conditioning

IHG	InterContinental Hotels Group
ILO	International Labour Organisation
ISO	International Organization for Standardization
ITP	International Tourism Partnership
LCA	Life cycle assessment
LCEA	Life cycle energy analysis
LED	Light-emitting diode (lamp)
LPG	Liquid petroleum gas
NACE	Nomenclature of Economic Activities
NECSTouR	Network of European regions committed to the issue of sustainable and competitive tourism
NOx	Nitrogen Oxides
PCR	Product Category Rules
SBS	Structural Business Statistics
TAS	Tourist accommodation services
UHT	Ultra-heat treated (milk)
UNEP	United Nations Environment Programme
UNWTO	UN World Tourism Organization
WEEE	Waste Electrical and Electronic Equipment
WTTC	World Travel and Tourism Council

Annex I BEMP comparison with EU Ecolabel criteria

The table below lists the most important environmental aspects (or hotspots) for tourism, as identified in the 2013 report *Best environmental management practice in the tourism sector* (JRC). This is cross referenced against the current EU Ecolabel criteria to demonstrate that all of the significant environmental hotspots identified are already considered in existing criteria – a significant update of the criteria is therefore not required.

Best Environmental Management Practice in the Tourism Sector (2013) **The most important actors and environmental aspects identified for the tourism sector.**	**Current EU Ecolabel criteria for TAS/CSS** **Relevant EU Ecolabel criteria which consider hotspots identified in the BEMP report. Criteria is either mandatory (M) or optional (O).**
Cross-cutting	
1. Undertake an assessment of the most important direct and indirect environmental aspects associated with the enterprise, and to apply relevant performance indicators and compare with relevant benchmarks of excellence as described in this document.	The EU Ecolabel includes criteria for: Developing an environmental management plan including environmental targets and monitoring (criteria 24, 27 and 28). Considering the impact of purchases of goods and services and green procurement, specifically encouraging the use of other EU Ecolabelled products (criteria 63, 64, 81 and 82). Ensuring efficient use of products, purchasing durable goods, maximising the period of use and minimising waste (criteria 5, 6, 7, 8, 14, 19, 20, 41, 42, 43, 71, 73, 79, 80, 82). Supply chain management including green sourcing of food (criteria 83, 84).
2. Identify supply chain environmental hotspots, considering the entire value chain, and to identify relevant control points (e.g. product selection, avoidance, green procurement, supplier criteria) that can be used to minimise the environmental impact over the value chain.	
Destination managers	
1. Establish a unit or organisation responsible for the strategic sustainable development of the destination that coordinates relevant departments to implement specific actions within the framework of a Destination Plan.	M General requirements In order to apply for the eco-label, the applicant must comply with Community, national and local legal requirements. In particular, it shall be guaranteed that: 1. The physical structure is built legally and respects all relevant laws or regulations of the area on which it is built, especially any related to landscape and biodiversity conservation. 2. The physical structure respects Community, national and local laws and regulations regarding energy conservation, water sources, water treatment and disposal, waste collection and disposal, maintenance and servicing of equipment, safety and health dispositions. 3. The enterprise is operational and registered, as required by national and/or local laws and its staff are legally employed and insured.
2. Monitor the state of biodiversity within the destination, and to implement a biodiversity conservation and management plan that protects and enhances total biodiversity within the destination through, for example, development restrictions and compensation measures.	
3. Ensure that environment-related services within the destination, especially water supply, wastewater treatment, waste management (especially recycling measures) and public transport/traffic management, are sufficient to cope with peak demand during tourism high season in a	

Best Environmental Management Practice in the Tourism Sector (2013) The most important actors and environmental aspects identified for the tourism sector.	Current EU Ecolabel criteria for TAS/CSS Relevant EU Ecolabel criteria which consider hotspots identified in the BEMP report. Criteria is either mandatory (M) or optional (O).
sustainable manner.	M 24. Policy setting and environmental program The management shall have an environmental policy and shall draw up a simple environmental policy statement and a precise action program to ensure the application of the environmental policy. The action program shall identify targets on environmental performance regarding energy, water, chemicals and waste, which shall be set every two years, taking into consideration the optional criteria and the data collected where available. It shall identify the person who will act as the environmental manager of the tourist accommodation and who is in charge of taking the necessary actions and reaching the targets. The environmental policy shall be available for consultation by the public. Comments and feedback from guests collected by means of a questionnaire or check list shall be taken into account. M 25. Staff training The tourist accommodation shall provide information and training to the staff, including written procedures or manuals, to ensure the application of environmental measures and to raise awareness of environmentally responsible behaviour.
4. Monitor the environmental impact of large events, and environmental management plans for such events that avoid and mitigate impacts, such as the provision of additional public transport to the event, the provision of good waste management facilities, and the offsetting of carbon and biodiversity impacts.	
Tour operators	
BEMP for tour operators	This is outside the scope of the EU Ecolabel criteria which is for TAS/CSS rather than for tour operators. However, the Ecolabel criteria does cover the following aspects which look at travel options and other wider environmental impacts: M 22. Public transportation Information shall be made easily available to the guests and staff on how to use public transportation to and from the tourist accommodation through its main means of communication. O 77. Bicycles (1,5 points) Bicycles shall be made available to guests. O 78. Pick up service (1 point) The tourist accommodation shall offer guests travelling with public transport pick up service at arrival with environmentally friendly means of transportation such as electric cars or horse sleds.
Accommodation water consumption	
1. Undertake a water consumption audit and monitor water consumption across key water-consuming processes and areas (i.e. sub-metering) in	M 27. Energy and water consumption data The tourist accommodation shall have procedures for collecting and monitoring data on overall

Best Environmental Management Practice in the Tourism Sector (2013) The most important actors and environmental aspects identified for the tourism sector.	Current EU Ecolabel criteria for TAS/CSS Relevant EU Ecolabel criteria which consider hotspots identified in the BEMP report. Criteria is either mandatory (M) or optional (O).
order to identify efficiency improvement options, and to ensure that all equipment is maintained through appropriate periodic inspection, including during housekeeping.	energy consumption (kWh), electricity and other energy sources consumption (kWh), and water consumption (litres). Data shall be collected where possible, monthly or at least yearly, for the period when the tourist accommodation is open, and shall also be expressed as consumption per overnight stay and per m 2 of indoor area. The tourist accommodation shall report the results yearly to the Competent Body that assessed the application. O 89. Energy and water meters (1 point)
2. Install efficient water-fittings, including low-flow spray taps and low-flow thermostatic-controlled showers, low- and dual-flush WCs, and waterless urinals. In the interim, aerators may be retro-fitted to existing fittings.	M 11. Water flow from taps and showers The average water flow of the taps and shower heads, excluding kitchen and bath tub taps, shall not exceed 9 litres/ minute. M 13. Urinal flushing All urinals shall be fitted with either automatic (timed) or manual flushing systems so that there is no continuous flushing. O 52. Water flow from taps and shower heads (1,5 points) Not exceed 8litres/minute O 53. WC flushing (1,5 points) Consume 6 litres/full flush, or less O 61. Water saving urinals (1,5 points)
3. Minimise laundry requirements through green procurement of bedclothes and towels (in terms of size, density, colour, material), and by requesting or encouraging guests to reuse bedclothes and towels. Best practice is also to train staff on the implementation of water- and chemical-efficient cleaning methods, and to procure environmentally certified consumables for bedrooms and bathrooms.	M 14. Changing towels and sheets Guests shall be informed of the environmental policy of the tourist accommodation on their arrival. This information shall explain that sheets and towels in the rooms shall be changed on their request, or by default at the frequency established by the environmental policy of the tourist accommodation or requested by law and/or national regulations. This applies only to tourist accommodations where the service includes the provision of towels and/or sheets.
4. Procure the most water- (and thus energy-) efficient washing extractors and the most energy efficient driers (e.g. heat-pump driers) and ironers, to reuse rinse water and, in high-water-stress areas, main wash water following micro-filtration. Best practice is also to recover heat from waste water and exhaust ventilation air.	O 43. Energy efficient appliances (d) (1 point): All household washing machines shall be of class A energy efficiency as laid down in Commission Directive 95/12/EC (3). (f) (1 point): All electric tumble driers shall be class A energy efficiency as laid down in Commission Directive 95/13/EC (6).

Best Environmental Management Practice in the Tourism Sector (2013) The most important actors and environmental aspects identified for the tourism sector.	Current EU Ecolabel criteria for TAS/CSS Relevant EU Ecolabel criteria which consider hotspots identified in the BEMP report. Criteria is either mandatory (M) or optional (O).
	↵O 55. Washing machine water consumption (1 point)
5. Select an efficient laundry service provider that is certified by an ISO Type-1 ecolabel or that complies with criteria in such labels (e.g. Nordic Ecolabelling, 2009), or to ensure that on-site large-scale laundry operations comply with such criteria.	Currently there are no EU Ecolabel criteria for laundry services, although this is a possible future candidate for criteria development. However, the EU Ecolabel does consider on-site laundry, which is covered by the following criteria: O 55. Washing machine water consumption (1 point) O 60. Indications on water hardness (up to 2 points) In laundry areas to allow better use of detergents by guests O 63. Detergents (up to 3 points) At least 80% by weight of hand dishwashing detergents and/or detergents for dishwashers and/or laundry detergent and/or all-purpose cleaners and/or sanitary detergents and/or soaps and shampoos used by the tourist accommodation shall have been awarded the Community eco-label or other national or regional ISO Type I eco-labels.
6. Optimise the frequency and timing of backwashing based on pressure drop rather than fixed schedules, to use ozonation or UV treatment and careful dosing control to minimise chlorination, and to recover heat from exhaust ventilation air.	O 37. Heat recovery (up to 1,5 points) The tourist accommodation shall have a heat recovery system for 1 (1 point) or 2 (1,5 points) of the following categories: refrigeration systems, ventilators, washing machines, dishwashers, swimming pool(s), and sanitary waste water. O 66. Swimming pools: Dosage of disinfectants (1 point) or natural/ecological swimming pools (1 point) The swimming pool shall have an automatic dosage system that uses the minimum amount of disinfectant for the appropriate hygienic result (1 point). Or The swimming pool shall be of the ecological/natural type (1 point).
7. Install a grey water recovery system that recovers grey water for use in indoor processes (e.g. toilet flushing) following treatment or exterior processes (e.g. irrigation), or a rainwater collection system that uses rainwater for indoor purposes.	O 50. Use of rainwater (2 points) and recycled water (2 points)
Waste management	
1. Prevent waste generation through green procurement of products, considering product lifecycle impacts – for example by avoiding single-use items (food,	M 19. Disposable products Unless required by law, disposable toiletries (not refillable) such as shampoo and soap, and other products (not reusable), such as shower caps, brushes, nail files, etc. shall not be used. Where such

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soaps, shampoos) and by buying cleaning agents in concentrated and bulk form – and by careful management of procurement volumes.	disposable products are requested by law the applicant shall offer to guests both solutions and encourage them with appropriate communication to use the non-disposable products. Disposable drinking systems (cups and glasses), plates and cutlery shall only be used if they made out of renewable raw materials and are biodegradable and compostable according to EN 13432. M 20. Breakfast Packaging Except where required by law, no single dose packages shall be used for breakfast or other food service, with the exception of dairy fat spreads (such as butter, margarine and soft cheese), chocolate and peanut butter spreads, and diet or diabetic jams and preserves. O 71. Disposable drink containers (2 points)
2. Provide separated waste collection facilities throughout the establishment, to ensure that there is a clear procedure for staff waste separation, and to contract relevant recycling services at least for glass, paper and cardboard, plastics, metals and organic waste.	M 17. Waste separation by guests Guests shall be informed how and where they can separate waste according to the best local or national systems within the areas to which the tourist accommodation belongs. Adequate containers for waste separation shall be available in the rooms or in easily reachable distance. M 18. Waste separation Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities, with particular care regarding hazardous waste, which shall be separated, collected and disposed of as listed in Commission Decision 2000/532/EC (1) and appropriate disposal shall be sought. This list includes toners, inks, refrigerating and electrical equipment, batteries, energy saving light bulbs, pharmaceuticals, fats/oils, and electrical appliances as specified in Directive 2002/96/EC (2) and Directive 2002/95/EC of the European Parliament and of the Council (3).
3. Where wastewater is not sent to a centralised wastewater treatment plant is to install an on-site wastewater treatment system that treats wastewater at least to secondary, and preferably to tertiary, level.	M 15. Correct waste water disposal The tourist accommodation shall inform guests and staff on the correct use of the waste water discharge, in order to avoid the disposal of substances that might prevent waste water treatment in accordance with the municipal waste water plan and Community regulations. Where a waste water plan from the Municipality is not available, the tourist accommodation shall provide a general list of substances that shall not be disposed of with the waste water according to the Directive 2006/118/EC of the European Parliament and of the Council (1).
Accommodation energy	

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1. Undertaken energy audit and monitor energy consumption across key energy-consuming processes and areas (i.e. sub-metering) in order to identify efficient improvement options, and to ensure that all equipment is maintained through appropriate periodic inspection.	M 27. Energy and water consumption data The tourist accommodation shall have procedures for collecting and monitoring data on overall energy consumption (kWh), electricity and other energy sources consumption (kWh), and water consumption (litres). Data shall be collected where possible, monthly or at least yearly, for the period when the tourist accommodation is open, and shall also be expressed as consumption per overnight stay and per m 2 of indoor area. The tourist accommodation shall report the results yearly to the Competent Body that assessed the application. M 23. Maintenance and servicing of boilers and air conditioning systems Maintenance and servicing of boilers and air conditioning systems 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. O 89. Energy and water meters (1 point)
2. Ensure that new buildings are compliant with the highest achievable energy ratings, as indicated by conformance with PassiveHouse and Minergie P standards, and that existing buildings are retrofitted to minimise heating and cooling energy requirements.	M 5. Energy efficiency of buildings The tourist accommodation shall comply with the national legislation and local building codes related to energy efficiency and the energy performance of buildings. O 39. Energy performance audits for buildings (1,5 points)
3. To minimise energy consumption from HVAC systems by installing zoned temperature control and controlled ventilation with heat recovery (ideally controlled by CO_2 sensors), energy-efficient components (e.g. variable-speed fans), and to optimise HVAC in relation to building-envelope and energy source characteristics.	M 3. Efficiency and heat generation If a new heat generating capacity is installed within the duration of the eco-label award, it shall be a high efficiency cogeneration unit (as defined by Article 3 and Annex III of Directive 2004/8/EC of the European Parliament and of the Council (1), a heat pump or an efficient boiler. In the latter case, the efficiency of such a boiler shall be of 4 stars (ca. 92% at 50 °C and 95% at 70 °C), measured according to Council Directive 92/42/EEC (2), or according to relevant product norms and regulations for those boilers not covered by this Directive. M 4. Air conditioning Any household air conditioner bought within the duration of the eco-label award shall have at least Class A energy efficiency as laid down in Commission Directive 2002/31/EC (4), or have

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	corresponding energy efficiency. O 41. Automatic switching-off of air conditioning and heating systems (1.5 points) O 42. Bioclimatic architecture (3 points)
4. To install efficient (e.g. Ecolabelled) heat pumps for heating and cooling, or where possible ground water cooling.	O 36. Heat pump (up to 2 points)
5. To install zoned and appropriately sized compact fluorescent and LED lighting with intelligent control based on motion, natural-light and time.	M 9. Energy efficient light bulbs (a) At least 80% of all light bulbs in the tourist accommodation shall have an energy efficiency of Class A as defined in Commission Directive 98/11/EC (3). This does not apply to light fittings whose physical characteristics do not allow use of energy-saving light bulbs. (b) 100% 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 fittings whose physical characteristics do not allow use of energy-saving light bulbs.
6. To install on-site geothermal, solar or wind energy generation where appropriate, and to procure electricity from a genuine (verifiable additional) renewable electricity supplier.	M 1. Electricity from renewable sources At least 50% of the electricity used for all purposes shall come from renewable energy sources, as defined in Directive 2001/77/EC of the European Parliament and of the Council (1). O 30. Generation of electricity through renewable energy sources (up to 4 points) O 31. Energy from renewable energy sources (up to 2 points)
Kitchens	
1. Assess food and drink supply chains to identify environmental hotspots and key control points, including choice editing of menus to avoid particularly damaging ingredients (e.g. some out of season fruit), and selection of environmentally-certified products.	O 83. Local food products (up to 3 points) O 84. Organic food (up to 2 points)
2. To minimise avoidable food waste by careful menu development and portion sizing, and to ensure that all organic waste is separated and send for anaerobic digestion where available, or alternatively incineration with energy recovery or local/on-site composting.	O 70. Composting (up to 2 points)
3. To select efficient washing equipment, including trigger-operated low-flow pre-rinse spray valves, efficient dishwashers and connectionless steamers, and to monitor and benchmark water consumption in	O 43. Energy efficient refrigerators (1 point), ovens (1 point) dishwashers (1 point), washing machines (1 point), dryers/tumblers (1 point) and office equipment (1 point) — (maximum of 3 points)

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kitchen/restaurant areas.	O 54. Dishwasher water consumption (1 point) O 55. Washing machine water consumption (1 point)
4. To select efficient cooking equipment, including induction-hob or pot-sensor-controlled gas ovens, efficient refrigeration equipment that uses a natural refrigerant such as ammonia or carbon dioxide, and to control ventilation according to demand.	O 43. Energy efficient refrigerators (1 point), ovens (1 point) dishwashers (1 point), washing machines (1 point), dryers/tumblers (1 point) and office equipment (1 point) — (maximum of 3 points) O 45. Refrigerator positioning (1 point) To reduce energy waste
Campsites (EU Ecolabel criteria for Campsite services)	
1. To provide guests with interactive on-site education of environmental issues, including courses, nature-trails, or equipment such as low-carbon transport (bicycles, electric bicycles).	M 27. Information to guests The campsite shall provide information to the guests, including conference participants, on its environmental policy, including safety and fire safety aspects, inviting them to contribute to its implementation. The information conveyed to the guests shall refer to the actions taken on behalf of its environmental policy and provide information about the Community eco-label. This information shall be actively given to the guests at the reception, together with a questionnaire covering their views about the environmental aspects of the campsite. Notices inviting guests to support the environ-mental objectives shall be visible to the guests, especially in the common areas and the rental accommodation. O 82. Environmental communication and education (up to 3 points)
2. To maximise on-site biodiversity through planting of native species, installation of green or brown roofs and walls, and to minimise water consumption for irrigation and light pollution arising from outdoor lighting (e.g. through use of correctly-angled low-pressure sodium lamps).	O 81. Roof landscaping (2 points) O 71. Insect and pest repellents (up to 2 points) Kept to a strict minimum or not used O 70. Organic gardening (2 points) O 63. Indigenous species used for new outdoor planting (1 point) O 50. Automatic switching off outside lights (1,5 points) O 51. Use of rainwater (2 points) and recycled water (2 points) O 52. Automatic watering systems for outside areas (1,5 points) To optimise watering times and water consumption
3. To minimise energy consumption for water-heating, HVAC and lighting through installation of low-flow fittings, good building insulation, and	M 5. Energy efficiency of buildings The campsite shall comply with the national legislation and local building codes related to energy

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fluorescent or LED lighting, and also to install on-site renewable energy generating capacity (e.g. solar water heating).	efficiency and the energy performance of buildings M 6. Window insulation All windows in heated and/or air conditioned rooms and common areas shall have appropriate degree of thermal insulation according to the local regulations and climatic conditions and shall provide an appropriate degree of acoustic insulation. M 9. Energy efficient light bulbs M 11. Water flow from taps and showers The average water flow of the taps and shower heads excluding bath tub taps, kitchen taps and filling stations shall not exceed 9 litres/minute. O 31. Generation of electricity through renewable energy sources (up to 4 points) O 42. Automatic switching-off of air conditioning and heating systems (1,5 points)
4.To minimise water consumption through the installation of low-flow taps and showers, shower-timer controls, and low- and dual-flush WCs.	O 57. Tap water temperature and flow (1 point) O 56. Washing machine water consumption (1 point) O 55. Dishwasher water consumption (1 point) O 54. WC flushing (1,5 points) O 53. Water flow from taps and shower heads (1,5 points)
5. To minimise residual waste generation by implementing waste prevention, by providing convenient on-site waste sorting facilities, and by contracting water recycling services.	M 18. Waste separation by guests Guests shall be informed how and where they can separate waste according to the best local or national systems within the areas to which the campsite belongs. Adequate containers for waste separation shall be as easily reachable as general waste bins. M 19. Waste separation Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities, with particular care regarding hazardous waste, which shall be separated, collected and disposed of as listed in Commission Decision 2000/532/EC (1) and appropriate disposal shall be sought. This list includes toners, inks, refrigerating and electrical equipment, batteries, energy saving light bulbs, pharmaceuticals, fats/oils, and electrical appliances as specified in Directive 2002/96/EC of the European Parliament and of the Council (2) and Directive 2002/95/EC of the European Parliament and of the Council (3). M 15. Correct waste water disposal The campsite shall inform guests and staff on the correct use of the waste water discharge, in

Best Environmental Management Practice in the Tourism Sector (2013) The most important actors and environmental aspects identified for the tourism sector.	Current EU Ecolabel criteria for TAS/CSS Relevant EU Ecolabel criteria which consider hotspots identified in the BEMP report. Criteria is either mandatory (M) or optional (O).
	order to avoid the disposal of substances that might prevent waste water treatment in accordance with the municipal waste water plan and Community regulations. Where a waste water plan from the Municipality is not available, the campsite shall provide a general list of substances that shall not be disposed of with the waste water according to the Groundwater Directive 2006/118/EC of the European Parliament and of the Council (1).
6. The installation of, or conversion of an existing pool to, a natural pool.	O 68. Swimming pools: Dosage of disinfectants (1 point) or natural/ecological swimming pools (1 point)

Annex II Comparison of Tourism and Accommodation Ecolabels

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
Nordic Swan *Includes mandatory criterion and points requirement for additional criterion – a set number of points needs to be achieved*	Includes mandatory limit values for energy consumption, based on Nordic climate mapping Mandatory requirements include: timed or demand controlled outdoor lighting; times sauna units; all newly purchased lamps must be low energy Points are awarded for: Undertaking an energy analysis; presence-controlled (sensor) lighting; low energy lamps; use of standby function on television sets; low energy minibars; use of standby functions on office equipment; maintaining an optimum swimming pool temperature; heating the pool with renewable energy.	Includes mandatory limit values for all fresh water consumption Points are awarded for: use of water saving showers, taps and WCs; other water-saving actions; metering pool, whirlpool, hot spring water consumption separately.	Includes mandatory limit values for all unsorted waste Mandatory requirements include: no disposable items or individual portion packs shall be used for food service; sorting and correctly disposing of all hazardous waste; sorting all other waste into fractions stipulated by the municipality; offering guests a battery collection facility; composting garden waste Points are awarded for: No disposable items use in bathrooms/ guest rooms; waste sorting facilities for guests; using returnable packaging; composting organic waste	Includes mandatory limit values for use of chemical products Mandatory requirements include: use of Ecolabelled dishwashing chemicals; a restriction on other detergent use; a % of laundry detergents and cleaning products must be used; not using chemical pesticides in outside areas; staff must have processes for chemical handling; ; a ban on refrigeration equipment containing CFCs refrigerants Points are awarded for: A limited use of dishwashing chemicals, dosage system for dishwashing chemicals; cleaning without chemicals; using environmentally friendly methods to clean any swimming pool	Mandatory requirements include: ensuring fixtures are fittings used in renovation (including newly purchased textiles) don't contain halogenated plastics or substances (e.g. PVC); 90% of tissue paper products should be Ecolabelled Points available for: re-use of printer toner cartridges; using Ecolabelled printing matter (paper, brochures etc.), soap and shampoo, other consumables and durable goods and Ecolabelled services (such as cleaning); rooms adapted for the physically disabled or allergy sufferers; provision of organic, Fairtrade, vegetarian, non-GMO or regional foodstuffs; using no vehicles or powering vehicles with renewable fuel; providing information about public transport, bicycles, horses and other environmentally friendly transport methods;	Includes mandatory limit values for the use of chemical products Mandatory criteria include: 60% non-smoking rooms; a non-smoking dining area; ensuring the hotel has appointed relevant people, who are taking actions to reduce environmental impact; developing an environmental management plan; all employees must be aware of the Nordic Swan and guests must be informed that the hotel in Nordic Swan labelled and how they can help (e.g. switching off lights). Where conference facilities are available, extra points are available for: waste sorting; use of Ecolabelled conference pads, flipcharts and pens; reusable drinking glasses; organically grown fruit.

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
					Ecolabelled bed linen and towels.	
Green Key	Mandatory criteria include: registering energy use monthly; controlling heating and air conditioning systems; regularly maintaining energy using devices; having 50% energy efficient light bulbs; new refrigeration equipment must not use CFC or HCFC refrigerants; newly purchased mini-bars	Mandatory criteria include: total water consumption must be registered at least once a month; water use by toilets and urinals, taps and showers are limited; wastewater must be treated; guests must be informed that towels and sheets will be changed on request Points are awarded for: limiting water use further in all areas of the hotel; monitoring water usage;	Mandatory criteria include: proper management of hazardous waste; waste separation for staff and guests; limited used of disposable cups, plates and cutlery Points are awarded for: not using single dose packaging; using biodegradable cups, plates and cutlery.	Mandatory criteria include: newly purchased chemical cleaning products will have Eco labels or restrict use of chemical substances; in Europe, tissue paper should be made out of non-chlorine bleached paper Points are awarded for: the use of fibre cloths for cleaning to save water and chemicals.		Mandatory criteria include: developing a documented environmental management system, including staff involvement; keeping guests informed about the Green Key award.
Travelife sustainability criteria	Mandatory criteria include: written environmental policy, environmental performance progress reports, planning procedure(s) in place for recent development(s) of up to 5 years, active engagement in meeting energy reduction targets. Points awarded for: environmental forum membership, installation of effective low energy lighting, evidence of low energy equipment,	A mandatory criterion is active engagement in reducing water consumption. Points awarded for: installation of water saving devices, regular staff reminder to reduce water consumption, grey water treatment, environmental efficiency of irrigation systems	Mandatory criteria include: compliancy with waste water regulation and active engagement in reducing solid waste. Points awarded for: efficient disposal of waste water, compliancy with waste regulations, recycling of waste, re-using waste, and composting waste, waste minimisation by buying in bulk	Mandatory criterion: active engagement in minimising use of chemical known to have health and environmental risks. Points awarded for: use of environmental friendly cleaning materials, management plan for refrigeration equipment that utilises CFC/HCFC	Points awarded for charitable donations and/or outreach projects relating to nature conservation, environmental protection in the destination area,	Mandatory criteria include: a policy for treatment of staff is in place, including fair treatment, non-discriminatory employment, encouraging employment of and preservation of rights to local people; encouraging donation and engagement with local community, including through providing information to guests; Points awarded for: staff training on above issues,

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
	consumption of renewable on-site.					business involvement/membership in associations, community forums, sustainable programmes
Green Tourism Business Scheme (GTBS) *Must adhere to minimum standards, and comply with optional standards based on a scoring system.*	Minimum standard – minimising possible pollution from oil tanks and car parks, provide progress reports Scoring guidelines include: monitoring energy usage, use of energy efficient appliances, energy efficient lighting, efficient utilisation of heating and cooling, renewable energy consumption	Minimum standard– provide progress reports Scoring guidelines include: monitoring water consumption, installation of the following, showers that use less than 12 litres a minute; taps that use less than 8.5 litres a minute; self-closing taps; PIR urinal controllers; short flush system; water efficient washing machines; water efficient dishwashers; drip irrigation system; and chlorine free water treatments. To ensure re-use of water, install water butts, capture rainwater and grey water harvesting.	Minimum standard – suitable waste management, provide progress reports Scoring guidelines include: Monitoring waste consumption, use renewable and re-useable packaging, use less paper in marketing, bulk buying – dosing procedures, food portion monitoring, implement waste reduction measures, on-site composting, purchase re-chargeable batteries, re-use electrical equipment/appliances, recycle toner cartridges, use construction waste where possible and recycle, re-use, recover where possible	Minimum standard – proper chemical storage Scoring guidelines: environmentally safe soaps and detergents	Scoring guidelines include: monitoring of flora/fauna on site, Provide public transport information, offer travel incentives, reduce impact of staff transport, employ carbon management system	Scoring guidelines include: having a green management file, an established green action plan, educate staff on environmental awareness, have in place a green team, provide training for the green team, be involved in a green related social group/association, take environmental advice from an external body
Global sustainable tourism (GST) criteria *All criteria must be applied to the*	Energy consumption is measured, monitored and reduced where possible. Renewable energy consumption is encouraged.	Water consumption is measured, monitored and reduced where possible. Sustainable water sourcing is encouraged.	Waste is measured, monitored and reduced where possible. Encourage recycling and re-use. Waste water including grey water must be treated and re-used	Minimisation of harmful chemicals and purchase environmentally friendly substitutes. Proper management of storage, use, handling, and disposal of chemicals.	The organisation must encourage customers and staff to reduce carbon emissions through transport related pollution, and promote sustainable transport.	Guests are given information about local areas, including conservation, appropriate behaviour and sites of cultural significance; measures need to be

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
greatest extent, unless a criterion is not applicable, supported with sound reasoning.			safely.		Must implement practices to reduce pollution from noise, light, runoff, erosion, toxic compounds, and air, water and soil contaminants.	taken to conserve local biodiversity; Other criteria include: working EMS, compliancy with regulations, environmental training for staff, sustainable marketing/promotion, customer satisfaction and building efficiency e.g. low energy devices, renovation, retrofit.
Ecolabel Malta *Mandatory criteria – 100% compliancy (51 out of 51)* *Voluntary Compliancy – minimum 50% (19 out of 38)*	Mandatory criteria include: management have received EMS training, there is designated staff for environmental responsibilities, regular environmental training for staff, active environmental initiatives (at least annually) and compliancy with regulations, monitoring air con rooms for leakages, installation of low energy devices e.g. lighting timers. Voluntary criterion: additional low energy measures e.g. power factor correction, voltage optimisation, and heating, public toilet flush/toilets.	Mandatory criteria include: preventative maintenance programme in place for water system; rainwater harvesting; water saving devices in showers, on taps and water cisterns. Guests are given option to reuse towels and bed sheets. Effective and automatic irrigation system to save water and daily monitoring (twice) Voluntary criteria: wash basins fitted with automatic controls, as are showers. Grey water treatment	Mandatory criteria include: measuring, monitoring and reducing waste where possible. Have implemented a waste separation and management system, to allow for recycling, re-use, disposal, minimisation of use of disposed and consumable goods. Voluntary criteria include: minimising paper usage, textile waste recycling, have a well maintained garbage room and waste compactor for recycling, hotel producing own compost,	Mandatory criteria include: a licensed waste contractor to dispose of hazardous waste. Reducing, replacing or eliminating corrosive products, phosphate, bleaching detergents, pesticides and other harmful substances. Hotel is using bio-cleaning products; CFC products are replaced with ecological ones. Suitable storage for chemicals, records kept for chemical use in pest control.	Mandatory criteria include: purchasing policy for ecologically sustainable goods e.g. local produce Voluntary criteria: recycled or ecological paper used for mailing, other office use, toilet rolls, & hand towels in public toilets, and use of recycled toners for in-house printing.	Mandatory criteria include: implement practices to offset GHG emissions and practices put in place to reduce noise, light pollution, water run-off & erosion.

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
		system.				
Green Globe	Energy consumption measures, sources identified and energy reduction goals	Water consumption measured, monitored and reduced where necessary by installing water saving devices	Waste water treated including grey water and re-used where possible. Recycling, re-using, recovering and composting as much as possible and reducing disposal of solid waste via landfill/incineration	Harmful substances including pesticides, paints, swimming pool disinfectants, and cleaning materials must be reduced, eliminated, or replaced (for sustainable products)	Purchase consumables from local sources where possible. Must implement practices to reduce pollution from noise, light, runoff, erosion, toxic compounds, and air, water and soil contaminants.	Have EMS in place, legal compliancy, employee training, customer satisfaction, promotional materials of sustainability, sustainable construction of buildings.
Green Seal *in addition to compliancy with previous standards	**For bronze rating:** energy efficient equipment, energy efficient lighting, equipment preventative maintenance **For silver rating*:** energy efficient windows, sensor timers lighting **For Gold rating*:** have set out large goals in energy reduction or, the property is an ENERGY STAR Leader	**For bronze rating:** as a minimum, properties must have installed the following fixtures or retrofits with: 2.2gpm faucets and aerators; 1.6 gpf toilets; 2.5gpm showerheads. Efficient water usage outside property i.e. reliant on natural water availability, limited irrigation to grasses for public use. **For silver rating*:** sidewalks, car parks and drives must be swept rather than washed down by potable water	**For bronze approval rating:** Minimising waste through efficient waste management i.e. implementing measures such as double sided printing/coping of paper, bulk purchasing to avoid single use products. Have an established recycling plan in place, including re-use where possible **For silver rating***: Food donation of leftover to local community support network, minimise the use of disposable food service items e.g. cutlery, plates, etc. Composting of food and	**For bronze rating:** use of non-toxic, non-phosphate, bio-degradable detergents and cleaning materials. Suitable storage of chemicals and air filtration/ventilation in the room. **For silver rating*:** chlorinated chemicals used only when there is no less toxic alternative, and only in minimal amounts.		

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
			yard waste. Recycle, donation or reuse used amenities e.g. shampoo bottles **For gold rating *:** hotels do not dispose of or incinerate 90% of its solid or water by-products, from reuse, recycling and composting.			
Das Österreichische Umweltzeichen (Austrian Ecolabel)	Criteria include: Regular data collection of energy used; energy survey or performance certificate; roof and loft insulation should be installed: adequate thermal insulation; ensure proper boiler maintenance and insulation; requirements for heat generation efficiency; efficient heating and air conditioning equipment; limiting use of coals and heavy oils; energy efficient lighting; outdoor heaters are only allowed in specific circumstances ; electricity from renewable sources encouraged; use of swimming pool cover; for conference rooms, 30% of equipment (e.g.	Criteria include: Regular data collection of water used guests must be informed that towels and sheets will be changed on request; water saving WCs, urinals, taps and showers should be installed; wastewater should be treated;	Criteria include: Regular data collection of waste produced; a written waste management plan must be in place; waste (including hazardous waste) must be separated; waste separation facilities should be available to guests; waste bins should be in toilets; restriction on sales of beverages in cans; returnable and reusable drinks containers should be used; restrictions on single dose food products; no disposable cups or plates;	Criteria include: Regular data collection of amounts of chemicals used; door mats (or similar dirt traps) must be put at all entrances; a proportion of cleaning products must be Type -1 Ecolabelled; disinfectants should only be used where legally required; mechanical pipe and drain cleaning should be used instead of chemical; toilet and urinal 'blocks' e.g. rim blocks) must not be used; no automatic detergent dosing for WCs and urinals; no pesticides (unless for regulatory requirements);	Criteria include: Offering of organic, or other certified foodstuffs; using elements of local art, cultural heritage etc. in design or in shops; arranging eco-friendly excursions for guests; preventing soil contamination when storing liquid fuels; office paper and conference paper must be Ecolabelled (type 1); no disposable products (i.e. non-refillable toiletries) shall be provided in guests rooms – unless required by regulations; new buildings but be in accordance with legal requirements and should not impact local communities or biodiversity; rooms	Criteria include: developing a sustainability management plan; ensuring equal employment opportunities; training staff in environmental practices; ensuring guests are aware of the label, measures the hotel is taking and appropriate other information (e.g. switching off lights); collecting guest satisfaction and feedback; no smoking in common areas ; take measures to reduce/avoid noise pollution;

Label	Energy criteria	Water criteria	Waste criteria	Detergents/Chemicals criteria	Other Services	General Management
	projectors) must be energy star or type-1 Ecolabelled; self-service areas must not have 'open front coolers';				adapted for physically disabled; free range eggs; local, organic, vegetarian food should be supplied; optional – a nutritionist, dietician offers advice on the menu; consider animal welfare in food provision; no GMO food; regional dishes and seasonable food is available; food is freshly prepared; no food additives; tap water is provided with meals; menus should indicate where food originates from; 'green catering' should be available; info on public transport and environmentally friendly travel is available to guests; native plants should be used; contribute to biodiversity protection	

Annex III NACE Codes

List of tourism characteristic activities

Tourism characteristic activities		ISIC Rev.4[1]	NACE Rev.2[2]	Description (NACE Rev.2)
1.	Accommodation for visitors	5510	5510	Hotels and similar accommodation
			5520	Holiday and other short-stay accommodation
		5520	5530	Camping grounds, recreational vehicle parks and trailer parks
		5590	5590	Other accommodation
		6810	6810	Buying and selling of own real estate
			6820	Renting and operating of own or leased real estate
		6820	6831	Real estate agencies
			6832	Management of real estate on a fee or contract basis
2.	Food and beverage serving activities	5610	5610	Restaurants and mobile food service activities
		5629	5629	Other food service activities
		5630	5630	Beverage serving activities
3.	Railway passenger transport	4911	4910	Passenger rail transport, interurban
4.	Road passenger transport	4922	4932	Taxi operation
			4939	Other passenger land transport n.e.c.
5.	Water passenger transport	5011	5010	Sea and coastal passenger water transport
		5021	5030	Inland passenger water transport
6.	Air passenger transport	5110	5110	Passenger air transport
7.	Transport equipment rental	7710	7711	Renting and leasing of cars and light motor vehicles
			7712	Renting and leasing of trucks
8.	Travel agencies and other reservation services activities	7911	7911	Travel agency activities
		7912	7912	Tour operator activities
		7990	7990	Other reservation service and related activities
9.	Cultural activities	9000	9001	Performing arts
			9002	Support activities to performing arts
			9003	Artistic creation
			9004	Operation of arts facilities
		9102	9102	Museums activities
			9103	Operation of historical sites and buildings and similar visitor attractions
		9103	9104	Botanical and zoological gardens and nature reserves activities
10.	Sports and recreational activities	7721	7721	Renting and leasing of recreational and sports goods
		9200	9200	Gambling and betting activities
		9311	9311	Operation of sports facilities
			9313	Fitness facilities
		9321	9321	Activities of amusement parks and theme parks
		9329	9329	Other amusement and recreation activities
11.	Retail trade of country-specific tourism characteristic goods	-		
12.	Other country-specific tourism characteristic activities	-		

[1] *United Nations (2008)*

[2] *UNStats Correspondence between ISIC Rev.4 and NACE Rev.2. Available at: http://unstats.un.org/unsd/cr/registry/regso.asp?Ci=70*

NACE Codes used in Table 8

Sector Name	NACE codes
Total non-financial business economy	NACE sections: B-N_S95_X_K - Total business economy; repair of computers, personal and household goods; except financial and insurance activities.
Total services	NACE sections: H, I, J, L, M, N and S95.
Total tourism industries	NACE classes: H4910, H4932, H4939, H5010, H5030, H5110, I5510, I5520, I5530, I5590, I5610, I5629, I5630, L6810, L6820, L6831, L6832, N7711, N7712, N7721, N7911, N7912 and N7990.
Mainly tourism	NACE classes: H5110, I5510, I5520, I5530, N7911 and N7912
Partially tourism	NACE classes: H4910, H4932, H4939, H5010, H5030, I5590, I5610, I5629, I5630, L6810, L6820, L6831, L6832, N7711, N7712, N7721 and N7990

Annex IV Country Codes

Code	Country
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
HR	Croatia
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

Annex V Tourism Sector Market Data

Number of enterprises, 2010

	Total non-financial business economy	Of which:	Tourism industries, of which:		Tourism industries, of which:					
		Tourism industries	Mainly tourism	Partially tourism	Transport related	Accom-modation related	Food related	Real estate	Car and other rental	Travel agencies and Tour operators
BE	538,545	84,893	:	:	2,723	3,274	41,971	33,852	1,210	1,862
BG	313,079	:	4,560	:	:	3,472	22,492	17,903	1,060	1,556
CZ	968,121	117,606	11,176	106,430	5,839	9,923	:	45,002	:	6,130
DK	208,237	41,839	1,925	39,914	3,435	1,503	11,335	24,691	365	510
DE	2,073,915	426,330	53,755	372,575	23,844	44,768	168,380	174,515	4,374	10,449
EE	52,180	7,684	865	6,819	380	597	1,343	4,634	400	330
IE	152,693	25,744	2,487	23,257	:	2,136	12,799	8,428	:	463
EL	:	:	:	:	:	:	:	:	:	:
ES	2,500,574	473,932	30,639	443,293	62,067	23,197	:	120,815	3,324	10,798
FR	2,513,679	438,861	40,388	398,474	38,833	36,650	195,552	149,724	12,140	5,962
HR	165,490	29,589	4,234	25,355	2,309	2,631	16,663	5,483	592	1,911
IT	3,867,813	561,319	54,335	506,984	28,864	44,498	247,773	222,083	3,815	14,286
CY	46,354	7,881	950	6,931	1,150	543	4,799	683	187	519
LV	81,319	17,230	1,312	15,919	714	765	2,323	11,868	927	633
LT	114,511	12,517	1,541	10,976	651	1,194	2,791	6,706	453	722
LU	28,345	5,922	412	5,510	188	319	2,489	2,714	109	103
HU	554,886	:	4,288	:	:	3,456	29,087	33,196	1,094	1,927
MT	:	:	:	:	:	:	:	:	:	:
NL	777,869	81,345	10,113	71,232	6,442	7,157	33,047	29,917	1,511	3,271
AT	301,739	68,638	15,634	53,004	5,350	14,934	28,936	17,163	701	1,554
PL	1,480,097	139,018	17,414	121,604	47,415	13,114	33,525	36,140	2,151	6,673
PT	861,135	128,736	7,823	120,913	11,679	6,478	78,473	29,019	724	2,363
RO	447,091	48,429	5,665	42,764	7,591	4,918	19,038	13,586	727	2,569
SI	115,243	12,205	1,455	10,750	1,150	1,011	7,091	2,135	181	637
SK	406,084	29,699	:	:	4,100	2,627	13,572	7,511	781	1,108
FI	224,505	39,323	1,488	37,835	9,562	1,724	9,102	17,081	431	1,423
SE	618,478	90,068	7,402	82,666	9,671	5,176	:	48,979	1,063	3,333
UK	1,649,086	219,659	20,704	198,955	11,299	15,077	107,022	75,289	4,607	6,365
EU-28	**21,927,107**	**3,389,515**	**329,319**	**3,060,196**	**340,455**	**269,634**	**1,494,827**	**1,146,330**	**46,741**	**91,525**

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Number of persons employed, 2010

	Total non-financial business economy	Of which:	Tourism industries, of which:		Tourism industries, of which:					
		Tourism industries	Mainly tourism	Partially tourism	Transport related	Accom-modation related	Food related	Real estate	Car and other rental	Travel agencies and Tour operators
BE	2,649,160	241,048	:	:	18,180	21,893	136,789	51,214	3,767	9,206
BG	1,927,935	:	43,564	:	:	36,928	100,116	35,490	1,869	6,263
CZ	3,460,140	274,028	:	:	42,083	34,520	:	57,906	2,345	12,092
DK	1,505,933	:	27,687	:	:	19,462	72,047	53,072	1,344	5,045
DE	24,932,382	2,702,381	624,148	2,078,232	296,824	495,870	1,360,303	440,747	24,633	84,004
EE	365,677	35,147	7,149	27,998	:	5,451	12,155	10,699	:	1,510
IE	1,080,859	189,605	56,475	133,129	:	45,859	93,753	21,597	:	4,495
EL	:	:	:	:	:	:	:	:	:	:
ES	11,989,152	1,654,188	327,158	1,327,030	188,139	252,265	:	202,050	17,385	54,174
FR	15,208,233	:	295,564	:	395,341	201,107	763,751	299,193	:	39,418
HR	1,075,442	123,510	:	:	13,191	32,421	59,940	10,477	1,314	6,167
IT	15,309,796	1,817,243	346,886	1,470,357	158,906	284,259	965,607	346,188	13,358	48,925
CY	242,049	:	:	:	:	16,874	23,151	1,700	731	2,640
LV	540,151	67,164	8,083	59,082	7,006	5,205	20,111	31,387	1,484	1,971
LT	775,203	72,017	8,513	63,504	16,179	5,699	28,218	18,092	:	2,649
LU	232,228	:	:	:	:	3,333	12,730	:	312	:
HU	2,437,262	:	28,890	:	:	23,732	105,458	69,329	2,925	5,524
MT	:	:	:	:	:	:	:	:	:	:
NL	3,864,883	586,079	117,715	468,364	109,793	73,698	288,485	82,137	8,102	23,864
AT	2,557,287	366,673	121,847	244,826	47,069	105,232	155,329	44,570	3,291	11,182
PL	8,372,380	540,116	86,774	453,342	129,476	66,837	150,971	166,307	6,255	20,270
PT	3,257,064	:	73,199	:	:	54,019	234,186	51,311	4,374	9,965
RO	3,713,223	250,470	50,907	199,563	57,259	43,495	94,273	44,383	2,019	9,041
SI	604,720	:	11,943	:	:	10,334	23,164	5,069	319	1,898
SK	1,471,438	95,289	:	:	11,846	12,538	39,779	25,753	2,080	3,293
FI	1,418,193	126,763	:	:	39,446	11,898	49,756	19,117	1,558	4,987
SE	2,892,259	:	:	239,335	:	41,439	:	74,923	2,705	12,166
UK	17,738,876	2,487,677	:	:	243,845	378,338	1,247,572	473,598	43,160	101,166
EU-28	**133,577,542**	**15,215,768**	**3,082,090**	**12,010,168**	**2,092,691**	**2,365,274**	**7,426,892**	**2,649,377**	**181,414**	**499,767**

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Turnover or gross premiums written, 2010 (in million EUR)

	Total non-financial business economy	of which:	Tourism industries, of which:		Tourism industries, of which:					
		Tourism industries	Mainly tourism	Partially tourism	Transport related	Accom-modation related	Food related	Real estate	Car and other rental	Travel agencies and Tour operators
BE	896,556	35,551	:	:	6,174	2,086	9,027	8,682	3,535	6,047
BG	93,689	3,676	1,244	2,432	696	554	8,776	1,097	82	369
CZ	409,590	16,047	:	:	2,136	1,416	:	6,811	515	1,736
DK	428,893	:	6,338	:	:	1,618	3,920	11,372	676	2,718
DE	5,030,225	227,520	58,476	169,044	33,490	21,649	40,728	101,045	7,574	23,034
EE	36,580	2,012	427	1,585	:	181	271	735	:	158
IE	302,398	17,172	8,537	8,635	:	2,283	5,249	1,542	:	1,341
EL	:	:	:	:	:	:	:	:	:	:
ES	1,783,684	117,417	41,677	75,740	17,489	16,201	:	21,309	4,714	17,573
FR	3,419,109	:	50,450	:	48,108	21,817	56,245	77,192	:	13,512
HR	78,051	4,196	:	:	604	1,268	1,020	640	166	499
IT	2,833,573	143,760	39,089	104,671	22,148	19,384	47,023	36,359	6,273	12,573
CY	26,579	:	:	:	:	829	986	119	66	116
LV	37,916	2,157	:	:	476	115	321	998	51	196
LT	51,959	2,102	400	1,702	533	112	336	873	:	196
LU	114,646	:	:	:	:	253	897	:	295	:
HU	247,902	:	2,388	:	:	723	2,081	5,388	464	775
MT	:	:	:	:	:	:	:	:	:	:
NL	1,263,891	66,482	:	:	13,855	4,963	:	23,175	5,562	7,216
AT	573,869	42,321	13,967	28,354	5,976	7,124	7,484	14,274	3,403	4,061
PL	777,637	28	4,774	23	4	1,982	3,444	14,865	890	2,096
PT	335,045	:	7,854	:	:	2,336	7,410	5,544	1,217	2,107
RO	211,980	6,551	1,879	4,672	1,325	893	1,381	2,104	243	606
SI	76,488	:	1,107	:	:	553	899	674	46	417
SK	145,833	4,821	:	:	280	296	950	2,599	236	460
FI	352,135	20,854	:	:	5,856	1,318	3,962	7,570	654	1,494
SE	662,907	:	:	40,225	:	3,488	7,260	27,806	732	5,822
UK	3,302,278	214,322	80,780	133,542	41,227	20,575	50,429	52,369	11,200	38,521
EU-28	**23,755,067**	**1,324,564**	**382,143**	**938,225**	**236,365**	**138,048**	**314,458**	**426,873**	**61,201**	**145,560**

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Value added at factor cost, 2010 (in million EUR)

	Total non-financial business economy	of which:	Tourism industries, of which:		Tourism industries, of which:					
		Tourism industries	Mainly tourism	Partially tourism	Transport related	Accom-modation related	Food related	Real estate	Car and other rental	Travel agencies and Tour operators
BE	176,405	12,296	:	:	1,444	926	3,007	4,575	1,777	566
BG	16,554	:	301	:	:	229	240	508	34	32
CZ	82,697	5,597	:	:	858	450	:	2,809	275	210
DK	114,878	:	1,461	:	:	691	1,636	7,366	190	301
DE	1,297,866	110,453	19,497	90,956	11,698	10,447	18,134	59,728	4,210	6,234
EE	7,247	561	93	468	:	61	85	327	:	26
IE	81,431	6,012	2,345	3,666	:	985	1,891	807	:	221
EL	:	:	:	:	:	:	:	:	:	:
ES	476,509	48,574	11,838	36,736	7,576	8,062	:	12,393	2,495	1,879
FR	871,787	:	15,307	:	20,563	8,865	24,734	36,425	:	1,849
HR	21,474	1,785	:	:	257	680	352	359	57	79
IT	670,216	58,675	11,901	46,774	9,235	9,154	17,117	18,478	3,254	1,437
CY	8,789	:	:	:	:	463	454	87	41	79
LV	7,715	730	:	:	47	53	93	501	18	18
LT	9,408	734	73	661	208	43	97	345	:	22
LU	17,986	:	:	:	:	128	417	:	160	:
HU	46,158	:	304	:	:	272	449	1,773	237	57
MT	:	:	:	:	:	:	:	:	:	:
NL	298,021	29,272	:	:	5,367	2,080	0	12,454	2,844	1,551
AT	151,348	18,457	4,440	14,018	2,151	3,621	3,367	7,550	1,366	401
PL	166,138	9	1,460	8	2	894	1,000	5,138	477	211
PT	77,866	:	2,258	:	:	1,061	2,811	1,673	700	233
RO	46,478	:	433	:	:	344	354	1,167	179	63
SI	17,625	:	286	:	:	246	304	271	16	42
SK	31,470	4,821	:	:	280	123	274	1,145	128	61
FI	84,621	8,361	:	:	2,123	411	1,455	3,923	253	196
SE	184,834	:	:	18,181	:	1,400	0	13,217	339	624
UK	925,088	87,385	20,607	66,777	14,325	9,981	20,043	32,166	5,156	5,715
EU-28	5,955,387	557,860	108,738	447,338	89,096	64,012	125,172	225,183	30,240	22,274

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Annex VI Accommodation Sector Statistics

Number of enterprises, 2010

	NACE Code			
	55.10	55.20	55.30	Total tourist accommodation
BE	1,891	962	387	3,240
BG	2,791	359	27	3,177
CZ	3,844	2,650	296	6,790
DK	880	206	394	1,480
DE	34,014	8,132	1,454	43,600
EE	242	338	2	582
IE	1,080	:	:	1,080
EL	:	:	:	:
ES	12,050	9,528	1,024	22,602
FR	18,861	12,819	4,603	36,283
HR	818	1,502	138	2,458
IT	24,479	17,945	1,645	44,069
CY	375	163	5	543
LV	295	399	60	754
LT	234	943	11	1,188
LU	232	14	72	318
HU	1,796	986	154	2,936
MT	:	:	:	:
NL	2,798	2,439	1,918	7,155
AT	11,824	2,343	269	14,436
PL	3,174	9,357	312	12,843
PT	4,095	2,222	103	6,420
RO	2,150	967	143	3,260
SI	377	580	31	988
SK	546	473	19	1,038
FI	695	230	131	1,056
SE	2,708	1,863	596	5,167
UK	9,561	3,318	1,735	14,614
EU-28	150,053	91,523	16,029	257,605

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Turnover or gross premiums written, 2010 (in million EUR)

	NACE codes			Total tourist accommodation
	55.10	55.20	55.30	
BE	1,644	327	113	2,084
BG	539	5	1	545
CZ	1,216	60	12	1,288
DK	1,362	126	128	1,616
DE	19,278	1,671	431	21,379
EE	167	13	:	180
IE	2,123	:	:	2,123
EL	:	:	:	0
ES	14,141	1,370	449	15,960
FR	15,794	3,507	1,993	21,294
HR	1,114	76	38	1,229
IT	15,827	2,596	844	19,267
CY	799	28	3	829
LV	101	12	2	115
LT	93	18	1	111
LU	228	:	:	228
HU	671	24	7	702
MT	:	:	:	:
NL	3,397	:	:	3,397
AT	6,656	311	77	7,044
PL	1,557	389	10	1,955
PT	2,214	76	46	2,335
RO	730	39	7	775
SI	490	26	3	520
SK	222	21	1	244
FI	1,205	40	21	1,266
SE	3,129	186	171	3,487
UK	15,734	1,869	2,705	20,308
EU-28	**113,773**	**14,545**	**7,717**	**136,034**

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Number of persons employed, 2010

	NACE Codes			Total tourist accommodation
	55.10	55.20	55.30	
BE	17,146	3,817	825	21,788
BG	34,965	629	69	35,663
CZ	28,545	2,072	403	31,020
DK	17,226	1,338	864	19,428
DE	435,154	43,918	9,562	488,634
EE	4,723	675	:	5,398
IE	42,532	:	:	42,532
EL	:	:	:	:
ES	212,880	28,194	6,458	247,532
FR	160,415	27,303	9,256	196,974
HR	26,216	2,812	625	29,653
IT	225,723	46,661	9,256	281,640
CY	16,337	506	31	16,874
LV	4,119	942	126	5,187
LT	4,765	858	51	5,674
LU	2,910		:	2,910
HU	20,926	1,455	353	22,734
MT	:	:	:	:
NL	52,687	12,413	:	65,100
AT	96,552	6,153	987	103,692
PL	45,688	19,614	572	65,874
PT	49,131	3,566	1,244	53,941
RO	35,466	2,460	547	38,473
SI	8,916	764	51	9,731
SK	7,866	1,170	62	9,098
FI	10,447	492	282	11,221
SE	36,935	2,312	2,182	41,429
UK	318,002	25,469	:	375,114
EU-28	1,982,016	254,012	86,025	2,322,053

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Value added at factor cost, 2010 (in million EUR)

	NACE Codes			Total tourist accommodation
	55.10	55.20	55.30	
BE	759.7	122.4	42.8	925
BG	225.5	-0.5	0.2	225
CZ	389.4	22.3	4.7	416
DK	582.5	50.2	57.5	690
DE	9,153.3	890.8	242.9	10,287
EE	55.9	4.9	:	61
IE	909.5	:	:	:
EL	:	:	:	:
ES	7,077.3	628.3	238.5	7,944
FR	6,928.6	859.4	871.0	8,659
HR	603.6	28.8	22.2	655
IT	7,459.8	1,215.4	419.7	9,095
CY	444.3	17.8	1.3	463
LV	47.6	4.7	0.5	53
LT	38.3	4.5	0.3	43
LU	115.7	:	:	:
HU	256.5	8.1	1.9	267
MT	:	:	:	:
NL	1,520.1	:	:	:
AT	3,395.4	147.0	39.7	3,582
PL	735.0	149.4	2.1	887
PT	1,017.3	19.7	23.3	1,060
RO	305.3	13.1	1.8	320
SI	220.1	8.4	1.1	230
SK	90.6	8.9	0.4	100
FI	368.6	14.9	7.6	391
SE	1,254.0	65.5	79.9	1,399
UK	7,796.2	937.1	1,124.8	9,858
EU-28	53,756.08	5,870.14	3,497.18	63,123.40

Source: Eurostat

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Annex VII Accommodation sector by size of enterprise

Number of enterprises, 2010

	Total number of enterprises	SMEs	Micro	Small	Medium	Large
	(thousands)	% of total number of enterprises				
BE	3,240	99	92	2	5	1
BG	3,177	100	85	9	5	:
CZ	:	:	:	:	:	:
DK	1,480	100	73	21	5	0
DE	43,600	100	70	27	3	0
EE	582	100	83	13	4	0
IE	1,080	100	100	:	:	:
EL	:	:	:	:	:	:
ES	22,602	100	85	15	0	:
FR	36,283	100	92	7	1	0
HR	2,458	99	86	9	4	1
IT	44,069	100	85	15	1	0
CY	543	97	56	23	18	3
LV	754	100	86	12	2	0
LT	1,188	100	89	9	2	:
LU	318	100	72	25	3	:
HU	2,936	100	88	10	2	0
NL	7,155	100	89	9	2	0
AT	14,436	100	83	15	2	0
PL	12,843	100	93	6	1	0
PT	6,420	100	84	12	3	0
RO	3,260	100	76	19	4	0
SI	988	99	90	7	3	1
SK	1,038	100	58	35	7	:
FI	1,056	100	82	15	2	0
SE	5,167	100	86	12	2	0
UK	14,614	99	63	28	8	1
EU-28	257,605	100	83	15	2	0

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Data for Malta is not available.

Micro – Enterprises employing 1 to 9 persons

Small – Enterprises employing 10 to 49 persons

Medium – Enterprises employing 50 to 249 persons

Large – Enterprises employing more than 250 people

SME – Aggregate of micro, small and medium enterprises

Number of persons employed, 2010

	Total number of persons employed	SMEs	Micro	Small	Medium	Large
	(thousands)	% of total number of persons employed				
BE	21,788	58	12	3	43	42
BG	35,663	100	15	34	51	-
CZ	:	:	:	:	:	:
DK	19,428	83	13	35	35	17
DE	488,634	89	23	45	21	11
EE	5,398	100	:	:	100	-
IE	42,532	100	100	:	:	:
EL	:	:	:	:	:	:
ES	247,532	100	38	62	1	:
FR	196,974	83	39	29	15	17
HR	29,653	100	13	28	59	:
IT	281,640	93	41	40	12	7
CY	16,874	70	6	13	51	30
LV	5,187	95	29	36	30	5
LT	5,674	100	28	18	55	-
LU	2,910	100	100	:	:	-
HU	22,734	77	23	27	28	23
NL	65,100	71	22	27	22	29
AT	103,692	95	36	39	20	5
PL	65,874	82	38	23	21	18
PT	53,941	85	20	30	34	15
RO	38,473	82	17	33	32	18
SI	9,731	100	100	:	:	:
SK	9,098	100	19	46	35	:
FI	11,221	100	91	9	:	:
SE	41,429	82	16	37	29	18
UK	343,471	56	7	21	28	44
EU-28	2,164,651	82	25	36	22	18

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Data for Malta is not available.

Micro – Enterprises employing 1 to 9 persons

Small – Enterprises employing 10 to 49 persons

Medium – Enterprises employing 50 to 249 persons

Large – Enterprises employing more than 250 people

SME – Aggregate of micro, small and medium enterprises

Turnover or gross premiums written, 2010

	Total turnover	SMEs	Micro	Small	Medium	Large
	million euros	**% of total turnover**				
BE	2,084	63	11	6	46	37
BG	545	100	11	21	67	:
CZ	:	:	:	:	:	:
DK	1,616	83	22	31	30	17
DE	21,379	81	18	39	24	19
EE	180	100	:	:	100	:
IE	2,123	100	100	:	:	:
EL	:	:	:	:	:	:
ES	15,960	100	28	71	1	:
FR	21,294	82	41	29	12	18
HR	1,229	100	11	30	60	:
IT	19,267	90	34	43	13	10
CY	829	71	6	14	51	29
LV	115	100	40	60	:	:
LT	111	100	25	11	63	:
LU	228	100	100	:	:	:
HU	702	70	16	22	32	30
NL	3,397	74	15	27	32	26
AT	7,044	93	30	41	22	7
PL	1,955	75	28	23	25	25
PT	2,335	80	14	27	39	20
RO	775	81	16	28	37	19
SI	520	100	100	:	:	:
SK	244	100	20	38	42	:
FI	1,266	100	93	7	:	:
SE	3,487	80	17	34	30	20
UK	20,308	55	9	21	25	45
EU-28	**136,034**	**76**	**22**	**30**	**24**	**24**

Source: Eurostat, Oakdene Hollins analysis
Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.
":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.
Data for Malta is not available.

Micro – Enterprises employing 1 to 9 persons
Small – Enterprises employing 10 to 49 persons
Medium – Enterprises employing 50 to 249 persons
Large – Enterprises employing more than 250 people

SME – Aggregate of micro, small and medium enterprises

Value added at factor cost, 2010

	Total value added	SMEs	Micro	Small	Medium	Large
	million euros	% of total value added				
BE	925	63	10	3	50	37
BG	225	100	6	26	68	:
CZ	:	:	:	:	:	:
DK	690	84	19	31	34	16
DE	10,287	83	19	41	23	17
EE	61	100	:	:	100	:
IE	910	100	100	:	:	:
EL	:	:	:	:	:	:
ES	7,944	100	26	73	1	-
FR	8,659	80	38	30	11	20
HR	655	100	9	28	63	-
IT	9,095	92	33	44	16	8
CY	463	71	6	14	52	29
LV	53	100	35	65	:	:
LT	43	100	13	7	80	:
LU	116	100	100	:	:	:
HU	267	67	14	18	35	33
NL	1,520	72	13	28	31	28
AT	3,582	94	30	42	22	6
PL	887	67	14	25	29	33
PT	1,060	81	12	29	40	19
RO	320	78	11	29	39	22
SI	230	100	100	:	:	:
SK	100	100	18	36	45	:
FI	391	100	91	9	:	:
SE	1,399	78	14	34	31	22
UK	9,858	55	10	21	24	45
EU-28	63,123	77	21	31	24	23

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Data for Malta is not available.

Micro – Enterprises employing 1 to 9 persons

Small – Enterprises employing 10 to 49 persons

Medium – Enterprises employing 50 to 249 persons

Large – Enterprises employing more than 250 people

SME – Aggregate of micro, small and medium enterprises

Annex VIII Accommodation sector by geographic location

Number of accommodation establishments by degree of urbanisation, 2012

	Densely-populated area	Intermediate urbanised area	Thinly-populated area	Total
BE	4,828	969	2,052	1,807
BG	2,758	749	886	1,123
CZ	7,631	1,172	1,599	4,860
DK	1,109	189	151	769
DE	52,776	7,153	19,895	25,699
EE	1,238	175	222	841
IE	8,098	:	:	:
EL	28,005	:	:	:
ES	45,740	6,643	8,178	30,919
FR	28,480	7,255	6,481	14,744
HR	57,808	1,436	14,738	41,634
IT	157,228	20,991	46,356	89,881
CY	802	78	207	517
LV	632	153	138	341
LT	1,032	287	325	420
LU	478	73	64	341
HU	4,071	746	676	2,649
MT	158	81	61	16
NL	6,851	1,282	2,506	3,063
AT	20,366	:	:	:
PL	9,483	1,564	3,154	4,765
PT	2,349	744	918	687
RO	5,113	1,240	1,610	2,263
SI	:	:	:	:
SK	2,907	:	929	1,618
FI	1,427	205	308	914
SE	4,142	628	1,066	2,448
UK	86,597	23,721	35,736	27,148
EU-28	**544,707**	**77,534**	**148,256**	**259,467**

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Number of bed-places by degree of urbanisation, 2012

	Densely-populated area	Intermediate urbanised area	Thinly-populated area	Total
BE	370,350	85,314	157,408	127,628
BG	301,140	84,354	120,490	96,296
CZ	653,835	143,475	112,742	397,618
DK	440,410	61,485	68,549	310,375
DE	3,464,600	802,204	1,136,900	1,539,922
EE	52,979	17,291	10,192	25,496
IE	219,874	:	:	:
EL	1,118,685	:	:	:
ES	3,414,798	735,512	1,257,094	1,422,192
FR	5,013,188	1,070,087	1,114,718	2,828,383
HR	798,928	21,889	198,359	578,680
IT	4,762,601	781,330	1,794,834	2,186,437
CY	86,645	13,088	37,783	35,774
LV	36,901	15,749	8,226	12,926
LT	54,163	18,127	17,026	19,010
LU	68,120	7,550	9,370	51,200
HU	382,819	93,134	61,839	227,846
MT	40,463	19,878	18,828	1,757
NL	1,213,412	196,244	465,923	551,245
AT	979,329	:	:	:
PL	675,433	163,093	200,626	311,714
PT	486,512	147,654	211,964	126,894
RO	285,488	97,247	110,710	77,531
SI	105,500	9,333	37,642	58,525
SK	193,369	:	61,713	97,432
FI	246,676	51,447	50,764	144,465
SE	792,864	143,211	196,753	452,900
UK	3,464,423	1,277,862	1,450,225	736,334
EU-28	29,723,505	6,056,558	8,910,678	12,418,580

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Number of tourist nights by degree of urbanisation, 2012

	Densely-populated area	Intermediate urbanised area	Thinly-populated area	Total
BE	12,796,216	12,518,947	6,108,300	31,423,463
BG	7,083,786	7,570,703	5,597,549	20,252,038
CZ	18,336,610	6,451,306	14,779,596	39,567,512
DK	8,588,292	3,230,348	16,221,595	28,040,235
DE	124,344,548	107,185,103	118,464,804	350,349,425
EE	3,119,312	1,209,501	1,215,724	5,544,537
IE	:	:	:	28,884,907
EL	:	:	:	78,177,354
ES	116,203,993	151,023,184	115,443,799	382,670,976
FR	151,984,307	94,849,224	153,692,028	400,525,558
HR	2,101,188	18,059,929	42,022,808	62,183,925
IT	99,221,514	145,251,144	136,238,825	380,711,483
CY	1,971,304	7,012,771	5,592,498	14,576,573
LV	2,338,171	748,728	459,837	3,546,736
LT	2,310,811	2,037,578	917,174	5,265,563
LU	888,804	308,786	1,244,995	2,442,585
HU	9,397,162	2,670,387	11,101,984	23,169,533
MT	3,688,733	3,873,276	270,220	7,832,229
NL	24,573,788	31,503,419	27,973,202	84,050,408
AT	:	:	:	109,540,720
PL	19,917,860	21,407,133	20,689,897	62,014,890
PT	19,356,321	19,649,402	7,775,368	46,781,091
RO	8,281,088	6,650,659	4,159,632	19,091,379
SI	1,080,634	3,419,570	4,905,805	9,406,009
SK	2,547,413	3,376,752	4,846,163	10,770,328
FI	8,004,460	4,462,470	7,850,652	20,317,582
SE	17,826,453	11,694,593	19,064,926	48,585,972
UK	155,124,014	74,369,412	74,072,102	303,564,528
EU-28	**821,086,782**	**740,534,325**	**800,709,483**	**2,579,287,539**

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":": Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Annex IX Accommodation sector by coastal / non-coastal area

Number of establishments, bed-places and tourist nights by coastal and non-coastal area, 2012

	Number of establishments		Number of bed-places		Number of tourist nights	
	Coastal area	Non-coastal area	Coastal area	Non-coastal area	Coastal area	Non-coastal area
BE	743	4,085	69,483	300,867	6,568,388	24,855,075
BG	1,040	1,718	203,085	98,055	13,792,828	6,459,210
CZ	0	7,631	0	653,835	0	39,567,512
DK	1,011	98	408,067	32,342	25,463,303	2,576,932
DE	8,084	44,625	614,483	2,857,450	60,749,736	289,244,719
EE	665	573	34,529	18,450	4,396,921	1,147,616
IE	:	:	:	:	:	:
EL	:	:	:	:	:	:
ES	15,835	29,905	2,399,797	1,015,001	303,005,138	79,665,837
FR	7,457	21,023	1,992,787	3,020,401	131,795,917	268,729,641
HR	55,497	2,311	758,027	40,901	59,097,785	3,086,140
IT	72,930	84,298	2,672,053	2,090,548	206,125,047	174,586,436
CY	802	0	86,645	0	14,576,573	0
LV	289	343	24,803	12,098	2,964,743	581,993
LT	408	624	17,694	36,469	1,354,579	3,910,984
LU	0	478	0	68,120	0	2,442,585
HU	0	4,071	0	382,819	0	23,169,533
MT	158	0	40,463	0	7,832,229	0
NL	2,122	4,729	384,668	828,744	25,435,740	58,614,669
AT	0	20,366	0	979,329	0	109,540,720
PL	1,964	7,519	176,074	499,359	15,162,627	46,852,263
PT	1,505	844	367,556	118,956	40,715,559	6,065,532
RO	532	4,581	80,983	204,505	3,802,075	15,289,304
SI	:	:	20,415	85,085	2,005,876	7,400,133
SK	0	2,907	0	193,369	0	10,770,328
FI	423	1,004	73,095	173,581	7,788,601	12,528,981
SE	1,837	2,305	423,763	369,101	29,827,512	18,758,460
UK	49,790	36,814	1,782,553	1,681,870	140,302,228	163,261,300
EU-28 (estimate)	223,092	282,852	12,631,023	15,761,255	1,102,763,405	1,369,105,903

Source: Eurostat, Oakdene Hollins analysis

Note: Due to unreliable data at country level and rounding, deviations can occur between total and subtotals.

":" : Aggregate not available due to one or more unreliable components at NACE 4 digit level.

Annex X Stakeholder questionnaire

1. Your contact details

These questions are addressed to all respondents:

First name:	Surname:
Email:	
Company/ Organisation:	
Organisation type: ☐ Hotel/ Campsite/accommodation provider ☐ Government ☐ Tour operators and agents ☐ Tourism or Travel/Trade Association ☐ Competent body ☐ Other (please specify)	
Company/Organisation details: Email address Country Telephone Number	

2. Scope and definition

These questions are addressed to all respondents:

Commission Decisions 2009/564/EC and 2009/578/EC define tourist accommodation services and camp site services as the following:

Tourist accommodation service: *The product group 'tourist accommodation service' shall comprise the provision, for a fee, of sheltered overnight accommodation in appropriately equipped rooms, including at least a bed, offered as a main service to tourists, travellers and lodgers.*

Campsite service: *The product group 'campsite service' shall comprise, as a main service provided for a fee, the provision of pitches equipped for mobile lodging structures within a defined area. Mobile lodging structures as referred are those such as tents, caravans, mobile homes and camper vans. Accommodation facilities suitable for the provision of shelter to lodgers are facilities such as bungalows, rental mobile lodging and apartments.*

It shall also comprise other accommodation facilities suitable for the provision of shelter to lodgers and collective areas for communal service if they are provided within the defined area. Collective areas for communal services are such as washing and cooking facilities, supermarkets and information facilities.

Do you agree with these existing definitions of scope?	☐ Yes ☐ No If no, please explain why and/or propose modification.

It is proposed that common criteria are developed for both product groups by merging criteria which apply for both service types (tourist accommodation services and campsite services), including additional criteria which only apply to one of the categories.

This would result in common criteria for both service types; hereafter referred to as *"tourist accommodation"*

Do you agree with combining EU Ecolabel Criteria for tourist accommodation services and campsite services?	☐ Yes ☐ No	If no, please explain why and/or propose modification.
Do you think there are significant differences between the two services which prevent them from being merged?	☐ Yes ☐ No	If yes, please explain why and/or propose modification
Do you think the term "tourist accommodation" accurately represents this merged criteria?	☐ Yes ☐ No	If no, please explain why and/or propose modification.

The definition for "tourist accommodation" will remain the same as in the previous EU Ecolabel criteria (see page 6) – i.e. although both tourist accommodation and camp sites will be considered as the same product group (with merged criteria for both), these are still two very distinct products and separate definitions will reflect this.

Is the proposed definition appropriate and suitable for this product category?	☐ Yes ☐ No	If no, please explain why and/or propose modification.
Are there any tourist accommodation or camp site services which are excluded by this definition which, in your opinion, should be included?	☐ Yes ☐ No	If yes, please indicate.

3. Background information and use of environmental labels

Please complete this section if you are a:

- Tourist accommodation or camp site service provider

A. Do you operate:

☐ Tourist accommodation (e.g. hotels, hostels or guest houses) and/or
☐ Campsites (e.g. the provision of pitches)

☐ Other

B. Alongside accommodation, what other activities/facilities do you provide?

☐ Meeting rooms and/or conference centres
☐ Entertainment or training/educational courses
☐ Restaurants & Cafes
☐ Attractions (e.g. theme park)
☐ Gym or spa facilities
☐ Swimming Pool(s)
☐ Shop

C. Is your accommodation star rated?

☐ YES ☐ NO

If "YES" please complete the table below:

Tourist accommodation by star classification	Number of sites star rated
1*	
2*	
3*	
4*	
5*	

D. Do you have the EU Ecolabel for tourism accommodation or camp sites?

☐ YES, I have the label for tourist accommodation *(go to question C)*
☐ YES, I have the label for camp sites *(go to question C)*
☐ YES, I have the label for tourist accommodation and camp sites *(go to question C)*
☐ NO *(go to question B)*

E. If "NO" please answer the following:

Have you ever applied or considered applying for the EU Ecolabel for tourist accommodation or camp sites?
☐ YES ☐ NO

What were the obstacles to applying for the EU Ecolabel?

☐ Cost
☐ Timing
☐ Stringency of Criteria
☐ The label is not recognised by customers
☐ We were not aware of the EU Ecolabel
☐ Others

If "Others", please specify:

F. If "YES" please answer the following:

Which criteria did you have the most difficulty complying with (if any) and what were the reasons for this?

	Please provide any details below:
☐ Mandatory: Energy	
☐ Mandatory: Water	
☐ Mandatory: Detergents and disinfectants	
☐ Mandatory: Waste	
☐ Mandatory: Other Services	
☐ Mandatory: General management	
☐ Optional: Energy	
☐ Optional: Water	
☐ Optional: Detergents and disinfectants	
☐ Optional: Waste	
☐ Optional: Other services	
☐ Optional: General management	

G. Are any of your services or systems certified to other environmental schemes for tourism? (for example Nordic Swan, Green key, Travel Life, Green globe or Earth check)?

☐ YES ☐ NO

If "YES", please specify which scheme(s)

4. Type of accommodation

Please complete this section if you are a:

- Tourist accommodation or camp site service provider

Type of tourist accommodation

You may fill out the tables with absolute (number of services) or relative values (%).

A. Please, indicate the number and/or % of <u>tourist accommodation services</u> by type, for 2012 or the latest year available

Type of tourist accommodation in line with definition		Number	%	Average length of stay
Bed and breakfast				
Hotels	Independent			
	Part of a chain			
Apartments	Independent			
	Part of a chain			
Hotel club				
Youth tourist accommodation				
Others				
TOTAL				

Please, indicate the number of <u>campsite services</u> by type, for 2012 or the latest year available

Type of tourist campsites in line with definition	Number	%	Average length of stay
Only with pitches			
Bungalows/Chalets and pitches			
Others e.g. mobile homes?			
TOTAL			

B. Please, indicate the number of <u>tourist accommodation services</u> by size

Tourist accommodation by size	Number	%
< 30 rooms		
Between 30 and 50 rooms		
Between 50 and 100 rooms		
>100 rooms		
Other		

Please, indicate the number of <u>camp site services</u> by size

Campsite per size	Number	%
< 50 spaces		
Between 50 and 100 spaces		
Between 100 and 200 spaces		
>200 spaces		
Other		

5. Use of the EU Ecolabel

Please complete this section if you are a:

- Tour Operators or Agent
- Tourist accommodation and camp site service provider
- Tourism or travel/trade association

A. Do you advertise or promote the EU Ecolabel to businesses or consumers?

☐ YES ☐ NO

B. If "YES" please answer the following:

Since 2009 (the introduction of the current criteria set) have you seen an increase or decrease in **industry use of the EU Ecolabel** for tourist accommodation services or camp site services? Please specify details:

Since 2009 (the introduction of the current criteria set) have you seen an increase or decrease in **customers awareness** of the EU Ecolabel for tourist accommodation services or camp site services? Please specify details:

Do you think the use of the EU Ecolabel will increase in the next 2 years? Please explain your answer:

Are there any other eco labels/green labels specific to tourism which are currently widely used by tourist accommodation providers?

C. Do you promote the use of any other ecolabels for tourism?

☐ YES ☐ NO

If "YES" please list these below:

D. **Are you currently involved in running or promoting, any eco/green initiatives for tourism (i.e. promoting eco-tourism, or setting internal targets to reduce your organisation's environmental impact?) Please specify:**

If you have any additional information relating to these eco/green initiatives, please provide details below or email to JRC-TOURIST-ACCOMMODATION@ec.europa.eu

If you have any information on market statistics for tourist accommodation and campsite services, please provide details below or email to JRC-TOURIST-ACCOMMODATION@ec.europa.eu

6. Applications and licences for the EU Ecolabel

Please complete this section if you are a:

- Competent body

A. **How many EU Ecolabel applications for tourist accommodations have you processed, or are processing, since 2009 (i.e. based on the current criteria set)? Please provide the number.**

How many of these are applications from outside your country? Please provide the number and the name of the country where the application is from.

B. **How many EU Ecolabel applications for camp sites have you processed, or are processing, since 2009 (i.e. based on the current criteria set)? Please provide the number.**

How many of these are applications from outside your country? Please provide the number and the name of the country where the application is from.

C. When assessing tourist accommodation and camp sites for the EU Ecolabel, which criteria have been the most problematic/have most applicants failed on or struggled to achieve? Please specify:

	Please provide any details below:
☐ Mandatory: Energy	
☐ Mandatory: Water	
☐ Mandatory: Detergents and disinfectants	
☐ Mandatory: Waste	
☐ Mandatory: Other Services	
☐ Mandatory: General management	
☐ Optional: Energy	
☐ Optional: Water	
☐ Optional: Detergents and disinfectants	
☐ Optional: Waste	
☐ Optional: Other services	
☐ Optional: General management	

D. What do you think would increase the number of licenses within this product group? *Please specify any actions you would recommend:*

E. If you manage a national environmental label scheme, specific to tourism, please complete details below:

Please write labels here:	Please write number awarded here:
e.g. Nordic Swan	2

F. How successful (or otherwise) have these labelling schemes been in terms of market penetration, or in comparison to the EU Ecolabel?

If you have any additional information on market statistics for tourist accommodation and campsite services, please provide details below or email to JRC-TOURIST-ACCOMMODATION@ec.europa.eu

7. Revision of current EU Ecolabel criteria

These questions are addressed to all respondents:

Weighting of criteria

Currently, each of the optional criteria set out in 'tourist accommodation services' and 'camp site services' criteria has been attributed a value expressed in points or fractions of points. In order to qualify for award of the eco-label, an applicant for tourist accommodation must score a minimum of 20 points. If a campsite does not offer other accommodations suitable for the provision of shelter to lodgers as part of its services, the minimum score required is 20; if it does, the minimum score required is 24.

The number of points for tourist accommodation services and camp site services is distributed as shown below:

Energy	36.5
Water	20
Detergents and disinfectants	13
Waste	8
Other services	29
General Management	12.5

A. Do you agree with the total number of points (a minimum of 20) required to meet the optional criteria?

☐ YES ☐ NO ☐ DON'T KNOW

If "NO" please explain why:

B. Currently, the 20 points required can be made up from any of the criteria categories (energy, water, detergents and disinfectants, other services). Should there be a requirement for licence holders to obtain a certain number of points from each category of the criteria?

☐ YES ☐ NO ☐ DON'T KNOW

If "YES" please explain why:

To achieve the EU Ecolabel for both tourist accommodation and campsite services, additional points are required from the optional criteria as follows:

...the total score required shall be increased by 3 points for each of the following additional services which are offered that are under the management or ownership of the tourist accommodation (or Campsite):

food services (including breakfast),

leisure/fitness activities, which include saunas, swimming pools and all other such facilities which are within the grounds. If the leisure/fitness activities consist in a wellness centre, the score required shall be increased by 5 points instead of 3,

green/outside areas, including parks and gardens which are open to guests and which, are not part of any campsite structure.

A. Do you agree with the number of points required per additional service?

☐ YES ☐ NO ☐ DON'T KNOW

If "NO" please provide comments below:

B. Are there any other services which should require additional points? (for example conference rooms)

☐ YES ☐ NO ☐ DON'T KNOW

If "YES" please indicate which other services should be included:

C. Please provide any further comments on the additional point requirements:

Social and quality criteria

Currently, the EU Ecolabel for both Tourist Accommodation Services and Camp Site services does not require assessment against social or quality criteria. However, general requirements to achieve the EU Ecolabel award ensure that:

1. The physical structure is built legally and respects all relevant laws or regulations of the area on which it is built, especially any related to landscape and biodiversity conservation.

2. The physical structure respects Community, national and local laws and regulations regarding energy conservation, water sources, water treatment and disposal, waste collection and disposal, maintenance and servicing of equipment, safety and health dispositions.

3. The enterprise is operational and registered, as required by national and/or local laws and its staff are legally employed and insured.

A. Do you think the revised criteria for the EU Ecolabel for tourist accommodation and camp site services should include additional social criteria?

☐ YES ☐ NO ☐ DON'T KNOW

If "YES" Please suggest below what social issues you think should be included.

B. Are there any other labels or awards relevant to tourism, which you think contain best practice social criteria?

C. Do you think the revised criteria for the EU Ecolabel for tourist accommodation and camp site services should include criteria regarding the quality aspects of the accommodation?

☐ YES ☐ NO ☐ DON'T KNOW

If "YES" please suggest below which quality criteria you think should be included.

D. How are quality criteria currently measured in tourist accommodation? Please provide details:

Existing criteria

Listed below are current criteria for tourist accommodation and campsite services which have been the subject of feedback from users since 2009. Please provide any comments you may have on these criteria.

Criteria 9 Energy efficient light bulbs.
(a) At least 80 % of all light bulbs in the tourist accommodation shall have an energy efficiency of Class A as defined in Commission Directive 98/11/EC (3). This does not apply to light fittings whose physical characteristics do not allow use of energy-saving light bulbs.
(b) 100 % 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 fittings whose physical characteristics do not allow use of energy-saving light bulbs.

Criteria 10 Outside heating appliances.
The tourist accommodation shall use only appliances powered with renewable energy sources to heat outside areas such as smoking corners or external dining areas.

Criteria 19 (*20 for campsites*) Disposable products.
Unless required by law, disposable toiletries (not refillable) such as shampoo and soap, and other products (not reusable), such as shower caps, brushes, nail files, etc. shall not be used. Where such disposable products are requested by law the applicant shall offer to guests both solutions and encourage them with appropriate communication to use the non- disposable products.
Disposable drinking systems (cups and glasses), plates and cutlery shall only be used if they are made out of renewable raw materials and are biodegradable and compostable according to EN 13432.

Criteria 20 *(21 for campsites)* Breakfast Packaging.
Except where required by law, no single dose packages shall be used for breakfast or other food service, with the exception of dairy fat spreads (such as butter, margarine and soft cheese), chocolate and peanut butter spreads, and diet or diabetic jams and preserves.

Criteria 28 (*(currently 30 for campsites)* Other data collection.
The tourist accommodation shall have procedures for collecting and monitoring data on consumption of chemicals expressed in kg and/or litres specifying if the product is concentrated or not and the quantity of waste produced (litres and/or kg of unsorted waste).
Data shall be collected where possible, monthly or at least yearly, and shall also be expressed as consumption or

production per overnight stay and per m^2 of indoor area.
The tourist accommodation [or camp site] shall report the results yearly to the Competent Body that assessed the application.

Criteria 29 *(currently 30 for campsites)* Optional information appearing on the eco-label.
Box 2 of the eco-label shall contain the following text:
— *This campsite/tourist accommodation is actively taking measures to use renewable energy sources, save energy and water, to reduce waste, to improve the local environment.*

Do you think this information is sufficient?

☐ YES ☐ NO

If "NO" what information would you like to see included?

A. The table on page 21 lists all of the current EU Ecolabel criteria for tourist accommodation and camp site services.

Please use the table to make any comments on specific criteria, including:
- *Should criteria be removed or modified?*
- *Do you agree with the number of points allocated to each of the optional criteria?*

B. From this table, are there any criteria listed as 'OPTIONAL' which you think should be 'MANDATORY'?

C. From this table, are there any criteria listed as 'MANDATORY' which you think should be 'OPTIONAL'?

D. If you have any comments about the existing EU Ecolabel criteria which have not been covered in this questionnaire, please provide details in the comments box below.

Please use the table below to indicate which of the criteria you believe should be kept, removed or modified - providing comments on each where this is the case:

ENERGY - MANDATORY			
Criteria:	**Please select:**		**Comments:**
1. Electricity from renewable sources	☐ Remove	☐ Modify	
2. Coal and heavy oils	☐ Remove	☐ Modify	
3. Efficiency and heat generation	☐ Remove	☐ Modify	
4. Air conditioning	☐ Remove	☐ Modify	
5. Energy efficiency of buildings	☐ Remove	☐ Modify	
6. Window insulation	☐ Remove	☐ Modify	
7. Switching off heating or air conditioning	☐ Remove	☐ Modify	
8. Switching off lights	☐ Remove	☐ Modify	
9. Energy efficient light bulbs	☐ Remove	☐ Modify	
10. Outside heating appliances	☐ Remove	☐ Modify	
WATER - MANDATORY			
Criteria:	**Please select:**		**Comments:**
11. Water flow from taps and showers	☐ Remove	☐ Modify	

12. Waste bins in toilets	☐ Remove	☐ Modify	
13. Urinal flushing	☐ Remove	☐ Modify	
14. Changing towels and sheets	☐ Remove	☐ Modify	
15. Correct waste water disposal	☐ Remove	☐ Modify	
16. Chemical toilet disposal (CDP) – currently for campsites only	☐ Remove	☐ Modify	
17. Disinfectants	☐ Remove	☐ Modify	
WASTE - MANDATORY			
Criteria:	**Please select:**		**Comments:**
18. Waste separation by guests	☐ Remove	☐ Modify	
19. Waste separation	☐ Remove	☐ Modify	
20. Disposable products	☐ Remove	☐ Modify	
21. Breakfast packaging	☐ Remove	☐ Modify	
OTHER SERVICES - MANDATORY			
Criteria:	**Please select:**		**Comments:**
22. No smoking in common areas	☐ Remove	☐ Modify	
23. Public transportation	☐ Remove	☐ Modify	

GENERAL MANAGEMENT - MANDATORY			
Criteria:	**Please select:**		**Comments:**
24. Maintenance and servicing of boilers and air conditioning systems	☐ Remove	☐ Modify	
25. Policy setting and environmental programme	☐ Remove	☐ Modify	
26. Staff training	☐ Remove	☐ Modify	
27. Information to guests	☐ Remove	☐ Modify	
28. Energy and water consumption data	☐ Remove	☐ Modify	
29. Other data collection	☐ Remove	☐ Modify	
30. Information appearing on the eco-label	☐ Remove	☐ Modify	

ENERGY – OPTIONAL				
Criteria:	**Please select:**		**Points:**	**Comments:**
31. Generation of electricity through renewable energy sources	☐ Remove	☐ Modify	Up to 4	
32. Energy from renewable energy sources	☐ Remove	☐ Modify	Up to 2	
33. Boiler energy efficiency	☐ Remove	☐ Modify	1.5	
34. Boiler NOx emissions	☐ Remove	☐ Modify	1.5	

35. District heating	☐ Remove	☐ Modify	1.5	
36. Combined heat and power - cogeneration	☐ Remove	☐ Modify	1.5	
37. Heat pump	☐ Remove	☐ Modify	Up to 2	
38. Heat recovery	☐ Remove	☐ Modify	Up to 1.5	
39. Thermoregulation	☐ Remove	☐ Modify	1.5	
40. Energy performance audits for buildings	☐ Remove	☐ Modify	1.5	
41. Air conditioning	☐ Remove	☐ Modify	Up to 2	
42. Automatic switching off of air conditioning and heating systems	☐ Remove	☐ Modify	1.5	
43. Bioclimatic architecture	☐ Remove	☐ Modify	3	
44. Energy efficient refrigeration, ovens, dishwashers, washing machines, dryers/tumblers and office equipment	☐ Remove	☐ Modify	Up to 3	
45. Electric hand and hair dryers with proximity sensor	☐ Remove	☐ Modify	Up to 2	
46. Refrigerator positioning	☐ Remove	☐ Modify	1	
47. Automatic switching off lights in rental accommodation	☐ Remove	☐ Modify	1.5	
48. Sauna timer control	☐ Remove	☐ Modify	1	

49. Swimming pool heating with renewable energy source	☐ Remove	☐ Modify	Up to 1.5	
50. Automatic switch off outdoor lights	☐ Remove	☐ Modify	1.5	
WATER – OPTIONAL				
Criteria:	**Please select:**		**Points:**	**Comments:**
51. Use of rainwater and recycled water	☐ Remove	☐ Modify	Up to 4	
52. Automatic watering systems for outside areas	☐ Remove	☐ Modify	1.5	
53. Water flow from taps and shower heads	☐ Remove	☐ Modify	1.5	
54. WC flushing	☐ Remove	☐ Modify	1.5	
55. Dishwasher water consumption	☐ Remove	☐ Modify	1	
56. Washing machine water consumption	☐ Remove	☐ Modify	1	
57. Tap water temperature and flow	☐ Remove	☐ Modify	1	
58. Shower timers	☐ Remove	☐ Modify	1.5	
59. Swimming pool cover	☐ Remove	☐ Modify	1	
60. De-icing	☐ Remove	☐ Modify	Up to 1.5	
61. Indications on water hardness	☐ Remove	☐ Modify	Up to 2	

62. Water saving urinals	☐ Remove	☐ Modify	1.5	
63. Indigenous species used for new outdoor planting	☐ Remove	☐ Modify	1	
DETERGENTS AND DISINFECTANTS – OPTIONAL				
Criteria:	**Please select:**		**Points:**	**Comments:**
64. Detergents	☐ Remove	☐ Modify	Up to 3	
65. Indoor and outdoor paints and varnishes	☐ Remove	☐ Modify	Up to 2	
66. Car washing only in specially outfitted areas *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
67. Support to alternatives to artificial barbecue lighter	☐ Remove	☐ Modify	1	
68. Swimming pools dosage of disinfectants or natural/ecological swimming pools	☐ Remove	☐ Modify	1	
69. Mechanical cleaning	☐ Remove	☐ Modify	1	
70. Organic gardening	☐ Remove	☐ Modify	2	
71. Insect and pest repellents	☐ Remove	☐ Modify	Up to 2	
72. Composting	☐ Remove	☐ Modify	Up to 2	
73. Disposable drink containers	☐ Remove	☐ Modify	2	
74. Fat/oil disposal	☐ Remove	☐ Modify	Up to 2	

75. Run-off from car parks *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
76. Used textiles, furniture and other products	☐ Remove	☐ Modify	Up to 3	
OTHER SERVICES – OPTIONAL				
Criteria:	**Please select:**		**Points:**	**Comments:**
77. Regulation of campsite traffic *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
78. Campsite generated traffic *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
79. Trolleys for guests on the campsite *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
80. Unsealed surfaces *(currently in campsite criteria only)*	☐ Remove	☐ Modify	1	
81. Roof landscaping	☐ Remove	☐ Modify	2	
82. Environmental communication and education	☐ Remove	☐ Modify	Up to 3	
83. No smoking in common areas and rental accommodation	☐ Remove	☐ Modify	Up to 1.5	
84. Bicycles	☐ Remove	☐ Modify	1.5	
85. Pick up service	☐ Remove	☐ Modify	1	
86. Returnable or refillable bottles	☐ Remove	☐ Modify	Up to 3	
87. Use of rechargeable products	☐ Remove	☐ Modify	Up to 2	

88. Paper products	☐ Remove	☐ Modify	Up to 3	
89. Durable goods	☐ Remove	☐ Modify	Up to 3	
90. Local food products	☐ Remove	☐ Modify	Up to 3	
91. Organic food	☐ Remove	☐ Modify	Up to 3	
92. Indoor air quality	☐ Remove	☐ Modify	Up to 4	
93. EMAS registration or ISO certification of the tourist accommodation or campsite	☐ Remove	☐ Modify	Up to 3	
94. EMAS registration or ISO certification of suppliers	☐ Remove	☐ Modify	1	
95. Compliance by subcontractors with mandatory criteria	☐ Remove	☐ Modify	Up to 4	
96. Energy and water meters	☐ Remove	☐ Modify	Up to 2	
97. Additional environmental actions	☐ Remove	☐ Modify	Up to 3	

For further information regarding this questionnaire, please contact:

JRC-TOURIST-ACCOMMODATION@ec.europa.eu

or visit EU Ecolabel Website for tourist accommodation and camp site services :
http://susproc.jrc.ec.europa.eu/tourist_accommodation/index.html

Once this survey has been completed, please email to :

JRC-TOURIST-ACCOMMODATION@ec.europa.eu

Thank you for your participation

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