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EMAS SECTORAL REFERENCE DOCUMENT
ON BEST ENVIRONMENTAL MANAGEMENT PRACTICE
IN THE **TOURISM SECTOR**

*A SET OF PRACTICAL STEPS TO IMPROVE
ENVIRONMENTAL PERFORMANCE*

IMPRINT

European Commission

EMAS Sectoral Reference Document on Best Environmental Management Practice
in the Tourism Sector

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1

INTRODUCTION



This document is a Sectoral Reference Document (SRD) established according to Article 46 of Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) ⁽¹⁾. With a view to facilitating the understanding of this SRD, this introduction provides an outline of its legal background and its use. The SRD is based on a detailed scientific and policy report ⁽²⁾ ('Best Practice Report') developed by the European Commission's Joint Research Centre (JRC).

It includes include Best Environmental Management Practices (BEMPs), Environmental Performance Indicators and Benchmarks of Excellence to help and support all organisations that intend to improve their environmental performance. Those elements are described more extensively in the [Best Practice Report](#).

RELEVANT LEGAL BACKGROUND

The Community eco-management and audit scheme (EMAS) was introduced in 1993, for voluntary participation by organisations, by Council Regulation (EEC) No 1836/93 ⁽³⁾. Subsequently, EMAS has undergone two major revisions:

- Regulation (EC) No 761/2001 of the European Parliament and of the Council ⁽⁴⁾,
- Regulation (EC) No 1221/2009.

An important new element of the latest revision, which came into force on 11 January 2010, is Article 46 on the development of Sectoral Reference Documents (SRDs). The SRDs have to include Best Environmental Management Practices (BEMPs), Environmental Performance Indicators for specific sectors and, where appropriate, Benchmarks of Excellence and rating systems identifying performance levels.

HOW TO UNDERSTAND AND USE THIS DOCUMENT

The eco-management and audit scheme (EMAS) is a scheme for voluntary participation by organisations committed to continuous environmental improvement. Within this framework, this Sectoral Reference Document (SRD) provides sector-specific guidance to the tourism sector and points out a number of options for improvement as well as best practices.

⁽¹⁾ OJ L 342, 22.12.2009, p. 1.

⁽²⁾ The scientific and policy report is publicly available on the JRC website at the following address: <http://susproc.jrc.ec.europa.eu/activities/emas/documents/TourismBEMP.pdf>. The conclusions on best environmental management practices and their applicability as well as the identified specific environmental performance indicators and the benchmarks of excellence contained in this Sectoral Reference Document are based on the findings documented in the scientific and policy report. All the background information and technical details can be found there.

⁽³⁾ Council Regulation (EEC) No 1836/93 of 29 June 1993 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme (OJ L 168, 10.7.1993, p. 1).

⁽⁴⁾ Regulation (EC) No 761/2001 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (OJ L 114, 24.4.2001, p. 1).

The document was written by the European Commission's Joint Research Centre using input from stakeholders. A Technical Working Group, comprising experts and stakeholders of the sector, led by the European Commission's Joint Research Centre, discussed and ultimately agreed on the Best Environmental Management Practices, sector-specific Environmental Performance Indicators and Benchmarks of Excellence described in this document; these benchmarks in particular were deemed to be representative of the levels of environmental performance that are achieved by the best performing organisations in the sector.

The SRD aims to help and support all organisations that intend to improve their environmental performance by providing ideas and inspiration as well as practical and technical guidance.

This SRD is primarily addressed to organisations that are already registered with EMAS; secondly to organisations that are considering registering with EMAS in the future; and thirdly to all organisations that wish to learn more about best environmental management practices in order to improve their environmental performance. Consequently, the objective of this document is to support all organisations and actors in the tourism sector to focus on relevant environmental aspects, both direct and indirect, and to find information on Best Practices, appropriate sector-specific Environmental Performance Indicators to measure their environmental performance, and Benchmarks of Excellence.

HOW SRDS SHOULD BE TAKEN INTO ACCOUNT BY EMAS REGISTERED ORGANISATIONS

According to Regulation (EC) No 1221/2009, EMAS registered organisations shall take SRDs into account at two different levels:

1. When developing and implementing their environmental management system in light of the Environmental Reviews (Article 4.1b);

This means that organisations should use relevant elements of the SRD when defining and reviewing their environmental targets and objectives in accordance with the relevant environmental aspects identified in the Environmental Review and policy, as well as when deciding on the actions to implement to improve their environmental performance.

2. When preparing the Environmental Statement (Article 4.1d and Article 4.4).

This means that:

- a) Organisations should consider the relevant sector-specific Environmental Performance Indicators in the SRD when choosing the indicators ⁽¹⁾ to use for their reporting of environmental performance.

When choosing the set of indicators for reporting, they should take into account the indicators proposed in the corresponding SRD and their relevance with regards to the significant environmental aspects identified by the organisation in its Environmental Review. Indicators need only be taken into account if relevant to those environmental aspects that are judged as being most significant in the Environmental Review.

- b) Organisations should mention in the Environmental Statement how the relevant Best Environmental Management Practices and, if available, Benchmarks of Excellence, have been taken into account.

They should describe how relevant Best Environmental Management Practices and Benchmarks of Excellence (which provide an indication of the environmental performance level that is achieved by best performers) were used to identify measures and actions, and possibly to set priorities, to (further) improve their environmental performance. However, implementing Best Environmental Management Practices or meeting the identified Benchmarks of Excellence is not mandatory, because the voluntary

character of EMAS leaves the assessment of the feasibility of the benchmarks and of the implementation of the best practices, in terms of costs and benefits, to the organisations themselves.

Similarly to Environmental Performance Indicators, the relevance and applicability of the Best Environmental Management Practices and Benchmarks of Excellence should be assessed by the organisation according to the significant environmental aspects identified by the organisation in its Environmental Review, as well as technical and financial aspects.

Elements of SRDs (indicators, BEMPs or Benchmark of Excellence) not considered relevant with regards to the significant environmental aspects identified by the organisation in its Environmental Review should not be reported or described in the environmental statement.

EMAS participation is an ongoing process. This means that every time an organisation plans to improve its environmental performance (and reviews its environmental performance) it shall consult the SRD on specific topics to find inspiration about which issues to tackle next in a step-wise approach.

EMAS environmental verifiers shall check if and how the SRD was taken into account by the organisation when preparing its Environmental Statement (Article 18(5)(d) of Regulation (EC) No 1221/2009).

This means that, when undertaking an audit, accredited environmental verifiers will need evidence from the organisation of how the relevant elements of the SRD have been selected in light of the Environmental Reviews and taken into account. They shall not check compliance with the described benchmarks of excellence, but they shall verify evidence on how the SRD was used as a guide to identify indicators and proper voluntary measures that the organisation can implement to improve its environmental performance.

Given the voluntary nature of EMAS and SRD, no disproportionate burdens should be put on the organisations to provide such evidence. In particular, verifiers shall not require an individual justification for each of the best practices, sector-specific Environmental Performance Indicators and Benchmarks of Excellence which are mentioned in the SRD and not considered relevant by the organisation in light of its Environmental Review. Nevertheless, they could suggest relevant additional elements for the organisation to take into account in the future as further evidence of its commitment to continuous performance improvement.

STRUCTURE OF THE SECTORAL REFERENCE DOCUMENT

This document consists of four chapters. Chapter 1 introduces EMAS' legal background and describes how to use this document, while Chapter 2 defines the scope of this SRD. Chapter 3 briefly describes the different Best Environmental Management Practices (BEMPs) together with information on their applicability, in general as well as at SME level. When specific Environmental Performance Indicators and Benchmarks of Excellence could be formulated for a particular BEMP, these are also given. Some of the indicators and benchmarks are relevant for more than one BEMP and are thus repeated whenever appropriate.

Finally, Chapter 4 presents a comprehensive table with a selection of the most relevant Environmental Performance Indicators, associated explanations and related Benchmarks of Excellence.

⁽⁴⁾ According to Annex IV (B.e.) of the EMAS Regulation, the environmental statement shall contain 'a summary of the data available on the performance of the organisation against its environmental objectives and targets with respect to its significant environmental impacts. Reporting shall be on the core indicators and on other relevant existing environmental performance indicators as set out in Section C'. Annex IV – Section C states that 'each organisation shall also report annually on its performance relating to the more specific environmental aspects as identified in its environmental statement and, where available, take account of sectoral reference documents as referred to in Article 46'.

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SCOPE



This document addresses some of the activities specified in section I 55-56 'Accommodation and Food Service Activities', section N 79 'Travel agency, tour operator reservation service and related activities' and section O 84.11 'General Public Administration Activities' of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council ⁽¹⁾ (NACE Rev.2).

This sectoral reference document (SRD) primarily covers Best Environmental Management Practices within organisations that provide accommodation, food and beverage services, or that manage tourism destinations or offer and reserve travel, accommodation or activities for tourism (travel agents and tour operators) ⁽²⁾. Companies providing tourist accommodation services and campsite services are also invited to consult the relevant provisions of the EU Ecolabel ⁽³⁾. Destination managers may also refer to other EU initiatives promoting sustainable tourism management, such as, among others, the European Tourism Indicators System (ETIS) ⁽⁴⁾.

⁽¹⁾ Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains (OJ L 393, 30.12.2006, p. 1).

⁽²⁾ This document does not directly target the cruise sector. However, a number of the BEMPs described may, to a certain extent, be also applicable to cruises.

⁽³⁾ <http://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html>

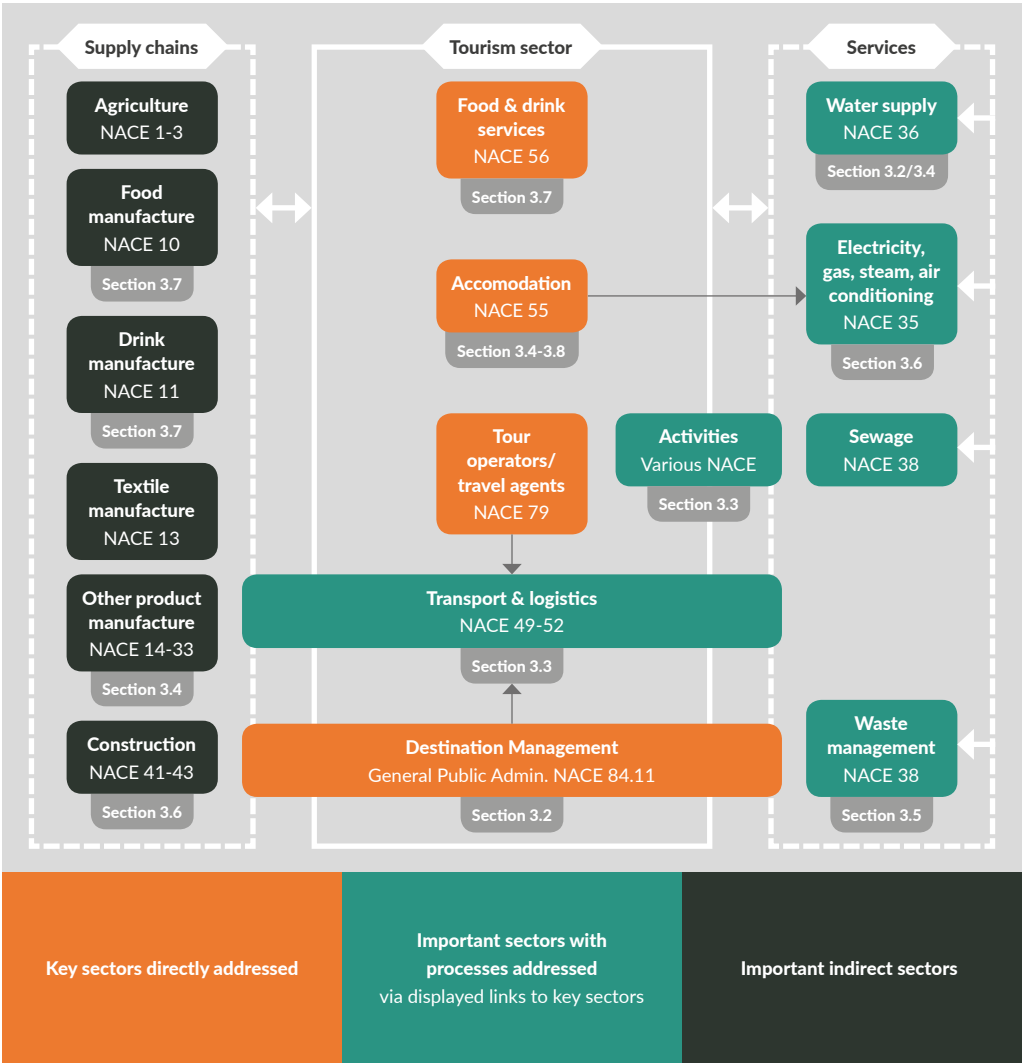
⁽⁴⁾ ETIS is a management and information toolkit, designed for helping destination in monitoring and measuring their sustainable tourism performances, against their own target. Further information is available at: http://ec.europa.eu/growth/sectors/tourism/offer/sustainable/indicators/index_en.htm



The actors mentioned above are interlinked with a variety of other sectors as portrayed in the tourism value chain diagram below. In terms of tourism as a product, the activities that a tourist participates in whilst on holiday are also an important part of the tourism value chain, and are of potential environmental interest. However, they are only referred to in this SRD insofar as they may be influenced by destination managers and tour operators.

The main environmental aspects and associated environmental pressures arising from tourism services are presented in the table below. These environmental aspects were selected as the most relevant in the sector. However, the environmental aspects to be managed by specific organisations should be assessed on a case by case basis.

OVERVIEW OF THE TOURISM SECTOR VALUE CHAIN



**ACTIVITIES IN TOURISM ORGANISATIONS
(HOTELS, CAMPSITES, RESTAURANTS AND TOUR OPERATORS)
AND ASSOCIATED ENVIRONMENTAL ASPECTS AND PRESSURES**

Service/Activity	Main environmental aspects	Main environmental pressures
Administration	<ul style="list-style-type: none"> - Office management - Reception of clients 	<ul style="list-style-type: none"> - Energy, water and material (mainly paper) consumption - Generation of municipal waste (large amounts of paper) and hazardous waste (e.g. toner cartridges)
Technical services	<ul style="list-style-type: none"> - Production of hot water and space heating/cooling - Lighting - Elevators - Swimming pools - Green areas - Pest and rodent control - Repair and maintenance 	<ul style="list-style-type: none"> - Energy and water consumption - Consumption of a range of hazardous products - In some cases use of CFC and HCFC refrigerants ⁽¹⁾. - Emissions to air (air pollutants, greenhouse gases) - Generation of a wide range of potentially hazardous waste types such as empty chemical containers - Generation of waste water
Restaurant/bar	<ul style="list-style-type: none"> - Breakfast, dinner, lunch - Beverages and snacks 	<ul style="list-style-type: none"> - Supply chain pressures (see 'Purchasing') - Energy, water and raw material consumption - Generation of municipal waste (especially food waste and packaging waste)
Kitchen	<ul style="list-style-type: none"> - Food conservation - Food preparation - Dish washing 	<ul style="list-style-type: none"> - Supply chain pressures (see 'Purchasing') - Significant consumption of energy and water - Generation of municipal waste (especially food waste and packaging waste) - Generation of vegetable oil waste - Generation of odours
Room use	<ul style="list-style-type: none"> - Use by guests - Products for guests' use - Housekeeping 	<ul style="list-style-type: none"> - Energy, water and raw materials consumption - Use of a wide range of hazardous products - Generation of waste packaging and small amounts of municipal waste - Generation of waste water

⁽¹⁾ CFC and HCFC stand for chlorofluorocarbon and hydrochlorofluorocarbon.

Service/Activity	Main environmental aspects	Main environmental pressures
Laundry	<ul style="list-style-type: none"> - Washing and ironing of guests' clothes - Washing and ironing of towel, bedclothes, etc. 	<ul style="list-style-type: none"> - Significant consumption of energy and water - Use of hazardous products - Generation of waste water
Purchasing	<ul style="list-style-type: none"> - Selection of products and suppliers - Storage of products 	<ul style="list-style-type: none"> - Supply chain pressures (land occupation, degradation or destruction of ecosystems, disturbance of wildlife, energy and water consumption, emissions to air – air pollutants and greenhouse gases -, emissions to water, waste generation) - Generation of packaging waste - Hazardous substance leakages
Activities	<ul style="list-style-type: none"> - Indoor activities - Outdoor activities 	<ul style="list-style-type: none"> - Energy, water and raw materials consumption - Local impacts on ecosystems - Noise - Generation of municipal waste - Infrastructure pressures (see 'Building and construction')
Transport	<ul style="list-style-type: none"> - Transport of guests - Transport of employees - Transport by suppliers 	<ul style="list-style-type: none"> - Energy (fuel) consumption - Emissions to air - Infrastructure pressures (see 'Building and construction')
Additional services	<ul style="list-style-type: none"> - Medical services, supermarkets, souvenir shops, spa and wellness, hairdresser, etc. 	<ul style="list-style-type: none"> - Energy, water and raw materials consumption - Generation of municipal waste, and some specific hazardous waste types (e.g. sanitary waste)
Building and construction	<ul style="list-style-type: none"> - Construction of new areas or services - Repair of existing areas or services 	<ul style="list-style-type: none"> - Land occupation - Degradation or destruction of ecosystems - Disturbance of wildlife - Energy and water consumption - Significant consumption of raw materials and hazardous products - Significant generation of construction waste - Generation of hazardous waste

The Best Environmental Management Practices (BEMPs) presented in this SRD are grouped as follows:

- BEMPs to improve cross-cutting issues in the tourism sector,
- BEMPs to improve destination management ⁽¹⁾,
- BEMPs to improve tour operators' and travel agents' activities,
- BEMPs to minimise water consumption in accommodation facilities,
- BEMPs to minimise waste production from accommodation facilities,
- BEMPs to minimise energy consumption in accommodation facilities,
- BEMPs to improve restaurant and hotel kitchens,
- BEMPs to improve campsites.

The BEMPs cover the most significant environmental aspects of the sector.

Interested in implementing some of the BEMPs?

Consult the **Best Practice Report**⁽²⁾ for detailed information, including practical examples of implementation.

⁽¹⁾ Destination management is the coordination of all relevant government and private actors, usually by a public body with or without private participation, aimed at supporting tourism development in a destination by making strategic decisions, implementing policy actions, maintaining and promoting cultural and natural heritage and attractions, coordinating events/festivals, raising revenue for tourism-related projects, facilitating cooperation between businesses, ensuring infrastructure and service provisions...

⁽²⁾ The Best Practice Report is publicly available on the EMAS website (www.emas.eu) and on the JRC website at the following address: <http://susproc.jrc.ec.europa.eu/activities/emas/documents/TourismBEMP.pdf>

3

BEST ENVIRONMENTAL MANAGEMENT PRACTICES, SECTOR ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARKS OF EXCELLENCE FOR THE TOURISM SECTOR



3.1. CROSS-CUTTING ISSUES

3.1.1. Environmental management system implementation

BEMP is to undertake an assessment of the most important direct and indirect environmental aspects associated with the organisation, and to apply relevant performance indicators and compare with relevant benchmarks of excellence.

APPLICABILITY

This BEMP is applicable to all tourism actors, including destination managers, tour operators, accommodation providers, food and drink providers, transport operators and activity providers. This BEMP is also fully applicable to **small enterprises** ⁽¹⁾.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARKS OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i1) Implementation of an environmental management system (y/n)	<p>(b1) Appropriate indicators are used to continuously monitor all relevant aspects of environmental performance, including less easily measurable and indirect aspects such as biodiversity impacts.</p> <p>(b2) All staff are provided with information on environmental objectives and training on relevant environmental management actions.</p> <p>(b3) Best environmental management practices are implemented where applicable.</p>

⁽¹⁾ A small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million (Commission Recommendation 2003/361/EC).

3.1.2. Supply chain management

BEMP is to screen supply chains for products and services used by the organisation in order to 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 whole value chain.

APPLICABILITY

This BEMP is applicable to all tourism actors, including destination managers, tour operators, accommodation providers, food and drink providers, transport operators and activity providers. This BEMP is also fully applicable to **small enterprises**.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARKS OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i2) Percentage of products and services complying with specific environmental criteria (%)	<p>(b4) The organisation has applied life cycle thinking to identify improvement options for all major supply chains that address environmental hotspots.</p> <p>(b5) $\geq 97\%$ of chemicals (by active ingredient weight or purchased volume) used in accommodation and restaurant premises are certified according to an ISO Type I ecolabel⁽¹⁾ (or can be demonstrated to be the most environmentally friendly available option).</p> <p>(b6) $\geq 97\%$ of all wood, paper and cardboard purchased by accommodations and restaurants are recycled or environmentally certified (ecolabelled, FSC, PEFC).</p>

⁽¹⁾ As part of the ISO 14000 series of environmental standards, the International Standards Organisation has drawn up a subseries (ISO 14020) specific to environmental labelling, which covers three types of labelling schemes. In this context a 'Type I' ecolabel is a multi-criteria label developed by a third party. Examples are, at EU level, the 'EU Ecolabel' or, at national or multilateral level, the 'Blaue Engel', the 'Austrian Ecolabel' and the 'Nordic Swan'.

3.2. DESTINATION MANAGEMENT

3.2.1. Strategic destination development plans

BEMP is to establish a unit or organisation responsible for the strategic sustainable development of the destination that coordinates relevant departments and stakeholders to implement specific actions within the framework of a destination plan.

APPLICABILITY

This BEMP is applicable to all destinations, either by units within government structures responsible for destination management or public/private destination management organisations. This BEMP is also applicable to small public administrations and **small enterprises** involved with destination management.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i3) Implementation of a sustainable destination plan (y/n)	(b7) Implementation of a destination plan that: (i) covers the entire destination area; (ii) involves coordination across all relevant government and private actors; (iii) addresses key environmental challenges within the destination.

3.2.2. Biodiversity conservation and management

BEMP is to 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.

APPLICABILITY

This BEMP is applicable to all destinations. High nature value destinations should conserve biodiversity while low nature value destinations should take measures to increase biodiversity. This BEMP is also applicable to **small enterprises** involved with destination management.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i4) Implementation of a biodiversity management plan (y/n)	(b8) Minimise and compensate for any biodiversity displaced by tourism development so that destination-level biodiversity is maintained or increased in high nature value areas, and increased in degraded areas.
(i5) Species abundance in the destination area	
(i6) Protected area (hectares or percentage of destination total area)	

3.2.3. Infrastructure and service provision

BEMP is to ensure that environment-related services within the destination, in particular water supply, waste water treatment, waste management (especially recycling measures) and public transport/traffic management, are sufficient to cope with peak demand during tourism high season in a sustainable manner.

APPLICABILITY

This BEMP is applicable to all destinations. It relates to good management by public administrations in general, but is particularly relevant where tourism generates large additional and seasonal demands for services. This BEMP is also applicable to small local public administrations and to small enterprises involved with destination management or providing the environment-related services required at a destination.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARKS OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i7) Daily water consumption per guest (l/guest-day)	(b9) Services, including public transport, water provision, waste water treatment and waste recycling, are designed to cope with peak demand and to ensure the sustainability of tourism within the destination.
(i8) Percentage of waste water sent to secondary or tertiary treatment (%)	(b10) ≥ 95 % of waste water generated in the destination receives at least secondary treatment, or tertiary treatment for discharge to sensitive receiving waters, including during peak tourist season.
(i9) Percentage of municipal solid waste sent for recycling or anaerobic digestion (%)	(b11) ≥ 95 % of municipal solid waste is diverted from landfill and sent for recycling or anaerobic digestion.
(i10) Percentage of journeys made by public transport, walking and cycling within the destination by tourists (%)	(b12) Average tourist water consumption ≤ 200 L per guest-day. (b13) Public transport, walking and cycling account for ≥ 80 % of journeys made by tourists within city destinations.
(i11) Percentage of final energy demand met by renewable energy generated on site (%)	

3.3. TOUR OPERATORS' AND TRAVEL AGENTS' ACTIVITIES

3.3.1. Reduce and mitigate the environmental impact of transport operations

BEMP is to implement 'choice editing' of packages offered to avoid unnecessary flights (i.e. flights that can be efficiently replaced by land or water transport), select highly energy-efficient transport providers (airlines, buses/coaches, ferries, ships, boats) and to offset all transport GHG emissions using certified offset schemes. For those companies running their own transport operations, BEMP is to implement energy efficiency measures for transport fleets (owned or supplied), including green procurement of the most efficient and low emission vehicles, retrofitting aircrafts and coaches/buses with energy-saving options such as winglets, and to optimise operations (e.g. maximise load factors).

APPLICABILITY

'Choice editing' of travel packages and reducing air travel is applicable to all tour operators and travel agents, including **small enterprises**.

Measures to improve the energy efficiency of transport and reduce its emissions to air are directly applicable to tour operators with control over their own transport fleets, and applicable as selection and contract criteria for tour operators who contract transport services. This BEMP is also applicable, with some limitations, to **small enterprises** as their degree of influence over aircrafts is usually very limited but may own/control their own ground/water transport.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i12) Unnecessary flights avoided (y/n)	(b14) Tour operators do not offer flights for: (i) destinations less than 700 km away; (ii) destinations up to 2 000 km away for a stay of less than eight days, or; (iii) destinations more than 2 000 km away for a stay of less than 14 days.
(i13) Specific transport GHG emissions (kg CO ₂ /passenger-km)	(b15) Tour operator airline fleets achieve an average specific fuel consumption of ≤ 2,7 litres per 100 passenger-km.
(i14) Percentage of transport GHG emissions offset with certified carbon credits (%)	(b16) Average coach or bus fleet fuel consumption of ≤ 0,75 litres per 100 passenger-km and at least 90 % of the fleet are EURO V-compliant or run on alternative fuel systems. (b17) Transport GHG emissions from all packages sold are automatically compensated by investing directly in GHG avoidance projects or by purchasing certified carbon credits.

3.3.2. Drive environmental improvement of accommodation providers

BEMP is to require or encourage environmental certification of accommodation providers, or to require compliance with specific environmental criteria, or to require environmental performance reporting that can be used to implement benchmarking.

APPLICABILITY

All tour operators can apply this BEMP. It may be easier for smaller tour operators to select suppliers based on thirdparty environmental certification, and for larger tour operators to apply their own criteria and/or a benchmarking process. This BEMP is applicable to **small enterprises** with some limitations, as it may be difficult to establish supplier criteria but **small enterprises** may use existing environmental certifications (preference should be given to third-party verified certification such as the EU Ecolabel) to select suppliers.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i15) Percentage of accommodation suppliers (by guest-nights or value sold) complying with specific environmental criteria (%)	(b18) ≥ 90 % of accommodation suppliers, based on sales value or overnight stays, are in compliance with a set of environmental requirements (preferably recognised by third-party certification).

3.3.3. Drive destination improvement

BEMP is to drive environmental improvement of tourism destinations by leveraging an improved environmental performance from local supplier organisations and from destination management organisations and authorities, and by directly undertaking improvement schemes such as habitat restoration within major destinations.

APPLICABILITY

This BEMP is directly applicable to larger tour operators. **Small enterprises** may coordinate actions through clusters or consortia or in public-private partnership with local/regional authorities.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i16) Percentage of services under environmental improvement within the destination (%)	(b19) The tour operator drives destination environmental improvement by: (i) improving supply chain performance; (ii) influencing destination management; (iii) direct improvement schemes.
(i17) Participation in environmental improvement projects at the destination (y/n)	

3.3.4. Develop and promote suitable tourism packages and encourage more sustainable tourist behaviour

BEMP is to develop and promote tourism packages that exclude the most environmentally damaging options, and include environmental front-runner transport, accommodation and activity options. Moreover, tour operators and travel agents should provide information to customers on the environmental impacts of tourism packages, and should pass on targeted positive and engaging messages on sustainable and responsible actions that can be taken by customers when choosing and taking holidays to minimise their environmental impact.

APPLICABILITY

All tour operators, including **small enterprises**, can implement measures from this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i18) Percentage of front-runner sustainable tours (e.g. ecolabelled) sold (by value) (%)	<p>(b20) The tour operator promotes sustainable tourism packages in mainstream advertising material</p> <p>(b21) Front-runner sustainable tourism packages (e.g. Austrian ecolabel for travel packages) represent a sales share $\geq 10\%$.</p> <p>(b22) The tour operator employs effective marketing and communication methods to encourage more sustainable choices in the selection of tourism packages.</p> <p>(b23) The tour operator provides all its customers with destination-specific and awareness-raising information to promote sustainable behaviour at the destination.</p>

3.3.5. Efficient retail and office operations

BEMP is to minimise the use of resources, especially paper and ink, for advertising and office operations, to select environmentally certified materials and services (e.g. printing services), and to ensure energy ⁽¹⁾ and water efficiency across all office and retail operations.

APPLICABILITY

This BEMP is applicable to all tour operators.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i19) Paper consumption per customer (g/customer)	(b24) Hard copy office and promotional material: (i) is avoided wherever possible; (ii) uses 100 % recycled or environmentally certified (e.g. ecolabelled, FSC, PEFC) paper; (iii) is printed by environmentally certified (e.g. EMAS, ISO 14001) printing services.
(i20) Environmental certification of paper and printing (y/n)	
(i21) Specific CO ₂ emissions from office and retail operations (kg CO ₂ /customer or kg CO ₂ /m ² yr)	(b25) Energy and GHG management plans are implemented and energy and GHG emissions arising from retail and office activities are reported and expressed per m ² of retail and office space per year, and per customer.
(i22) Annual water consumption in office buildings per employee (l/employee-yr)	(b26) Water consumption is ≤ 2,0 m ³ per employee per year.

⁽¹⁾ This can be done in the framework of the implementation of an energy management system according to ISO 50001.

3.4. MINIMISING WATER CONSUMPTION IN ACCOMMODATION FACILITIES

3.4.1. Water system monitoring, maintenance and optimisation

BEMP is to undertake a water consumption audit and monitor water consumption across key water-consuming processes and areas (i.e. sub-metering) in order to identify efficiency improvement options, and to ensure that all equipment is maintained through appropriate periodic inspection, including during housekeeping.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included. However, it may not be necessary to retrofit sub-meters in small facilities.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i23) Water consumption per guest-night (l/guest-night)	<p>(b27) Implementation of a site-specific water management plan that includes: (i) sub-metering and benchmarking all major water-consuming processes and areas; (ii) regular inspection and maintenance of water system 'leak points' and appliances.</p> <p>(b28) Total water consumption \leq 140 L per guest-night in fully serviced hotels, and \leq 100 L per guest-night in accommodation where the majority of the bathrooms are shared (e.g. hostels).</p>

3.4.2. Efficient water fittings in guest areas

BEMP is to install efficient water fittings, including low-flow spray taps and low-flow thermostatic showers, low- and dual-flush WCs, and waterless urinals. In the interim, aerators may be retrofitted to existing fittings.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included. Where refurbishment has recently taken place, measures such as the fitting of aerators are still applicable.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i23) Water consumption per guest-night (l/guest-night)	(b29) Water consumption, and associated energy consumption for water heating, of ≤ 100 L and 3,0 kWh per guest-night, respectively, for en suite guest bathrooms.
(i24) Energy consumption for water heating (kWh/guest-night)	(b30) Shower flow rate ≤ 7 L/min, bathroom tap flow rate ≤ 6 L/min (≤ 4 L/min new taps), average effective toilet flush $\leq 4,5$ L, installation of waterless urinals.
(i25) Flow rates of showers, bathroom taps, urinals and toilet flushes (l/min or l/flush)	

3.4.3. Efficient housekeeping

BEMP is to 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.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included. Laundry minimisation through selection of more efficient room textiles is universally applicable, but the applicability of laundry minimisation by encouraging guests to reuse is limited for accommodation facilities with a high percentage of single-night guests.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i26) Laundry mass generated per guest-night (kg/guest-night)	(b31) At least 80 % of bedclothes are cotton-polyester mix ⁽¹⁾ or linen.
(i27) Percentage of reused towels and bedclothes (%)	(b32) At least 80 % of bedroom textiles have been awarded an ISO Type I ecolabel (e.g. EU Ecolabel) or are organic.
(i28) Consumption of chemical products for cleaning and dishwashing in terms of active chemical ingredients per guest-night (g/guest-night)	(b33) Consumption of chemical products for cleaning and dishwashing (excluding laundry detergents, special cleaners and pool chemicals) ≤10 grams of active chemical ingredients per guest- night.
(i29) Percentage of ISO Type I ecolabelled chemicals and textiles (%)	(b34) Reduction in laundry achieved through reuse of towels and bedclothes of at least 30 %.
	(b35) At least 80 % (by active ingredient weight or purchased volume) of the all-purpose cleaners, sanitary detergents, soaps and shampoos used by the tourist accommodation have been awarded an ISO Type I ecolabel (eg. EU Ecolabel).

⁽¹⁾ Bedclothes made of a cotton-polyester mix have longer durability and require less laundering energy than those made of pure cotton.

3.4.4. Optimised small-scale laundry operations

BEMP is to 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, the main wash water following micro-filtration. Best practice is also to recover heat from waste water and exhaust ventilation air.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation that perform laundry operations on site, **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i30) Water consumption per kg of laundry (l/kg)	(b36) For small scale laundry operations, all new domestic washing machines have an EU energy label rating of A+++ , and commercial washing machines have an average laundry water consumption ≤ 7 L per kg of laundry washed.
(i31) Energy consumption per kg of laundry (kWh/kg)	
(i32) Percentage of ecolabelled laundry detergents (%)	
	(b37) Total on-site small-scale laundry process energy consumption $\leq 2,0$ kWh per kg of textiles, for dried and finished laundry products.
	(b38) At least 80 % of the small-scale laundry detergents used (by active ingredient weight or purchased volume) have been awarded an ISO Type I ecolabel (e.g. EU Ecolabel, Nordic Swan, Blaue Engel).

3.4.5. Optimised large-scale or outsourced laundry operations

BEMP is to select an efficient laundry service provider that is certified by an ISO Type I ecolabel or that complies with criteria in such labels, or to ensure that on-site large-scale laundry operations comply with such criteria.

APPLICABILITY

This BEMP is applicable to large accommodation facilities with on-site large-scale laundry operations, as well as commercial laundry operators. This BEMP is also applicable to other accommodation of all sizes, including small enterprises, insofar as the criteria are applicable for green procurement of laundry services.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i33) Ecolabelled laundry service (y/n) (i30) Water consumption per kg of laundry (l/kg)	(b39) All outsourced laundry is carried out by a provider who has been awarded an ISO Type I ecolabel (e.g. Nordic Swan), and all in-house large-scale laundry operations, or laundry operations outsourced to non-certified service providers, comply with the relevant benchmarks.
(i31) Energy consumption per kg of laundry (kWh/kg)	(b40) Total water consumption over the complete wash cycle of large-scale laundry operations of ≤ 5 L per kg textile for accommodation laundry and ≤ 9 L per kg textile for restaurant laundry.
(i32) Percentage of ecolabelled laundry detergents (%)	(b41) Total process energy consumption for dried and finished large-scale laundry products of $\leq 0,90$ kWh per kg of textiles for accommodation laundry and $\leq 1,45$ kWh per kg of textiles for restaurant laundry. (b42) For large-scale laundry operations, exclusive use of laundry detergents for professional use compliant with an ISO Type I ecolabel (e.g. EU Ecolabel, Nordic Swan), applied in appropriate doses.

3.4.6. Optimised pool management

BEMP is to optimise the frequency and timing of backwashing based on the 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.

APPLICABILITY

This BEMP is applicable to accommodation companies with on-site swimming pools, **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i34) Implementation of a pool environmental management plan (y/n)	(b43) Implementation of an efficiency plan for swimming pool and spa areas that includes: (i) benchmarking specific water, energy and chemical consumption in swimming pool and spa areas, expressed per m ² of pool surface area and per guest-night; (ii) minimisation of chlorine consumption through optimised dosing and use of supplementary disinfection methods such as ozonation and UV treatment.
(i35) Application of ozonation or UV treatment (y/n)	

3.4.7. Rainwater and grey water recycling

BEMP is to install a grey water recovery system that recovers grey water for use in indoor processes (e.g. toilet flushing) following treatment, or for exterior processes (e.g. irrigation), or a rainwater collection system that uses rainwater for indoor purposes.

APPLICABILITY

This BEMP is applicable to all accommodation companies. Water recycling systems may be installed during building construction or major renovation. The applicability to **small enterprises** may be limited because of the high investment cost.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i36) Implementation of grey water or rainwater recycling (y/n)	(b44) Installation of a rainwater recycling system that supplies internal water demand, and/or a grey water recycling system that supplies internal or external water demand.

3.5. WASTE AND WASTE WATER MANAGEMENT IN ACCOMMODATION FACILITIES

3.5.1. Waste prevention

BEMP is to prevent waste generation through green procurement of products, considering product life cycle impacts – for example by avoiding single-use items (food, soaps, shampoos) and by buying cleaning agents in concentrated and bulk form – and by careful management of procurement volumes.

APPLICABILITY

This BEMP is applicable to all type and sizes of accommodation, **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i37) Waste generation per guest-night (kg/ guest-night)	(b45) Total waste generation (sorted plus unsorted) \leq 0,6 kg per guest-night.

3.5.2. Waste sorting and sending for recycling

BEMP is to provide separated waste collection facilities throughout the establishment, to ensure that there is a clear procedure for waste separation, and to contract relevant recycling services at least for glass, paper and cardboard, plastics, metals and organic waste.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i38) Percentage of waste sent for re-use or recycling (%)	(b46) At least 84 % of waste, expressed on a weight basis, is sent for recycling.
(i39) Unsorted waste generated per guest-night (kg/guest-night)	(b47) Unsorted waste sent for disposal is $\leq 0,16$ kg per guest-night.

3.5.3. Waste water treatment

BEMP is to install an on-site waste water treatment system that treats waste water at least to secondary, and preferably to tertiary, level, and includes at least pretreatment to screen solids and settle particulate matter followed by efficient biological treatment (e.g. in a sequencing batch reactor) to remove a high proportion of COD, BOD, nitrogen and phosphorus from the final effluent. Sludge is treated and disposed of in an environmentally acceptable manner.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation not connected to a sewer network, **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i40) Removal efficiency of on-site waste water treatment (e.g. % of BOD, COD)	(b48) Where it is not possible to send waste water for centralised treatment, on-site waste water treatment includes pretreatment (sieve/bar-rack, equalisation and sedimentation) followed by biological treatment with > 95 % BOD ₅ removal, > 90 % nitrification, and (off-site) anaerobic digestion of excess sludge.
(i41) Concentration in final effluent (mg/l) (e.g. BOD, COD, total nitrogen, phosphorous)	

3.6. MINIMISING ENERGY CONSUMPTION IN ACCOMMODATION FACILITIES

3.6.1. Energy monitoring and management systems

BEMP is to undertake an energy audit and monitor energy consumption across key energy-consuming processes and areas (i.e. sub-metering) in order to identify efficiency improvement options, and to ensure that all equipment is maintained through appropriate periodic inspection ⁽¹⁾.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included. Extensive sub-metering and building management systems are not applicable to small facilities.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i42) Implementation of a site-specific energy management plan (y/n)	(b49) Implementation of a site-specific energy management plan that includes: (i) sub-metering and benchmarking all major energy-consuming processes; (ii) calculation and reporting of primary energy consumption and energy-related CO ₂ emissions.
(i43) Specific energy use (kWh/m ² yr)	
	(b50) For existing buildings, final energy use for HVAC (heating, ventilation and air conditioning) and water heating ≤ 75 kWh, or total final energy use ≤ 180 kWh, per m ² heated and cooled area per year.

⁽¹⁾ This can be done in the framework of the implementation of an energy management system according to ISO 50001.

3.6.2. Improved building envelope

For new buildings, BEMP is to ensure that these are compliant with the highest achievable energy ratings, such as the PassiveHouse and Minergie P standards⁽²⁾. For existing buildings, BEMP is retrofitting to minimise heating and cooling energy requirements⁽³⁾.

APPLICABILITY

This BEMP is applicable to all types of accommodation during construction or major renovation, and during building selection for organisations which rent their premises. The opportunity for **small enterprises** to implement this BEMP may be limited in the case of retrofitting an existing building, because of the high investment cost.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i43) Specific energy use (kWh/m ² yr)	<p>(b50) For existing buildings, final energy use for HVAC (heating, ventilation and air conditioning) and water heating ≤ 75 kWh, or total final energy use ≤ 180 kWh, per m² heated and cooled area per year.</p> <p>(b51) For new buildings, the rated energy performance conforms with Minergie P or PassiveHouse standards or equivalent.</p>

⁽²⁾ Passive House and Minergie P are two examples of very ambitious building standards in terms of energy performance. Their requirements are described respectively at: http://www.passiv.de/en/02_informations/02_passive-house-requirements/02_passive-house-requirements.htm and http://www.minergie.ch/minergie_fr.html

⁽³⁾ More specific BEMPs on improving the building envelope and, more broadly, the environmental sustainability of buildings are described in the upcoming EMAS Sectoral Reference Document for the Construction sector.

3.6.3. Optimised HVAC systems

BEMP is to minimise energy consumption from HVAC (heating, ventilating, and air conditioning) systems by installing products with the top energy label classes (when applicable), zoned temperature control and controlled ventilation with heat recovery (ideally controlled by CO₂ sensors) and energy-efficient components (e.g. variable-speed fans), and to optimise HVAC in relation to building-envelope and energy source characteristics.

APPLICABILITY

This BEMP is applicable to all type and sizes of accommodation, **small enterprises** included. Full optimisation can only be made during construction or major renovation, but specific measures can be implemented at any time.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i43) Specific energy use (kWh/m ² yr)	<p>(b50) For existing buildings, final energy use for HVAC (heating, ventilation and air conditioning) and water heating ≤ 75 kWh, or total final energy use ≤ 180 kWh, per m² heated and cooled area per year.</p> <p>(b51) For new buildings, the rated energy performance conforms with Minergie P or PassiveHouse standards or equivalent.</p>

3.6.4. Efficient applications of heat pumps and geothermal heating/cooling

BEMP is to install efficient (e.g. ecolabelled, products with the top energy label classes) heat pumps for heating and cooling, or, where possible, groundwater cooling.

APPLICABILITY

This BEMP is applicable to all types of accommodation. In urban areas, it may only be possible to install groundwater systems during building construction or major renovation. Air-source heat pumps are easy to retrofit, but may not be suitable for very cold climates. The applicability of this BEMP may be limited for **small enterprises** because of the investment cost.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i43) Specific energy use (kWh/m ² yr)	(b52) Water-source heat pumps and/or geothermal heating/cooling are used in preference to conventional heating and cooling systems wherever feasible, and heat pumps comply with EU Ecolabel criteria and with the top energy label classes.

3.6.5. Efficient lighting and electrical equipment

BEMP is to install zoned and appropriately sized compact fluorescent and LED lighting with intelligent control based on motion, natural light and time. BEMP is also to optimise building design and interior layout with respect to the use of natural light, considering the energy impact of large glazed areas for heating and cooling. As regards electrical equipment (white goods and consumer electronics), products with EU Ecolabel or the top energy label classes should be chosen whenever possible.

APPLICABILITY

This BEMP is applicable to all types and sizes of accommodation, **small enterprises** included. Compact fluorescent and LED lamps can often directly substitute incandescent and halogen lamps. Building modification to optimise use of natural light is restricted to initial construction and renovation.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i44) Installed lighting capacity (W/m ²)	(b53) Installed lighting capacity ≤ 10 W per m ²
(i45) Lighting-specific energy use (kWh/m ² yr)	(b54) Lighting electricity use ≤ 25 kWh per m ² heated and cooled floor area per year.
(i46) Total electricity use (kWh/m ² yr)	(b55) Total electricity use ≤ 80 kWh per m ² heated and cooled floor area per year.

3.6.6. Renewable energy sources

BEMP is to install on-site geothermal, solar or wind energy generation equipment where appropriate, and to procure electricity from a genuine (i.e. verifiably additional) renewable electricity supplier.

APPLICABILITY

The potential to exploit particular renewable energy technologies on site depends on location- and site-specific factors such as climate, shading, available space, etc. Investment in off-site renewable energy schemes may be undertaken by any organisation. The applicability of this BEMP may be limited for **small enterprises** in cases of long payback times.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i11) Percentage of final energy use met by renewable energy generated on site (%)	(b56) The equivalent of 50 % of the accommodation's annual energy use is generated by on-site renewable sources, or by verifiably additional off-site renewable energy sources.
(i47) Use of certified renewable energy credits (y/n)	(b57) 100 % of electricity is from traceable renewable electricity sources not already accounted for by another organisation or in the national electricity average generating mix, or that are less than two years old.

3.7. RESTAURANTS AND HOTEL KITCHENS

3.7.1. Green sourcing of food and drink products

BEMP is to assess food and drink supply chains to identify environmental hotspots and key control points, including selection of environmentally certified products and editing of menus to avoid particularly damaging ingredients (e.g. endangered fish species and some out-of-season fruit) and ensure judicious portioning of meat and dairy products and availability of vegetarian options.

APPLICABILITY

This BEMP is applicable to all kitchens. Kitchens in rural locations may be able to source food on site. Larger kitchens may have a stronger influence over suppliers. **Small enterprises** can also fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i48) Percentage of environmentally certified ingredients (by value) (%)	(b58) The organisation is able to provide documented information, at least including country of origin, for all main ingredients. (b59) At least 60 % of food and drink products, by procurement value, are environmentally certified (e.g. organic).

3.7.2. Organic waste management

BEMP is to minimise avoidable food waste by careful menu development and portion sizing, and to ensure that all organic waste is separated and sent for anaerobic digestion where available, or alternatively incineration with energy recovery or local/on-site composting.

APPLICABILITY

This BEMP is applicable to all kitchens. The preferred waste recycling option of anaerobic digestion may not be available in some locations, in which case waste may be sent for incineration with energy recovery or composting. **Small enterprises** can also fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i49) Organic waste generation (kg per dining guest)	(b60) $\geq 95\%$ of organic waste is separated and diverted from landfill, and, where possible, sent for anaerobic digestion.
(i50) Percentages of organic waste sent for anaerobic digestion, alternative energy recovery, composted on-site or sent for composting (%)	(b61) Total organic waste generation $\leq 0,25$ kg per dining guest, and avoidable waste generation $\leq 0,18$ kg per dining guest.

3.7.3. Optimised dishwashing, cleaning and food preparation

BEMP is 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 kitchen/restaurant areas.

APPLICABILITY

This BEMP is applicable to all kitchens. Installation of more efficient dishwashers may only be economically viable when existing dishwashers are approaching the end of their working life or require repairing. **Small enterprises** can also fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i51) Kitchen water consumption per dining guest (l/dining guest)	(b62) Implementation of a kitchen water management plan that includes monitoring and reporting of total kitchen water consumption normalised per dining guest, and the identification of priority measures to reduce water consumption.
(i52) Percentage of ecolabelled dishwashing and kitchen cleaning chemicals (%)	(b63) At least 70 % of the purchase volume of chemical cleaning products (excluding oven cleaners) for dishwashing and cleaning are ecolabelled (e.g. EU Ecolabel).
(i53) Green procurement of efficient kitchen equipment (y/n)	

3.7.4. Optimised cooking, ventilation and refrigeration

BEMP is to select efficient cooking equipment, including induction-hob or pot-sensor-controlled gas hobs, efficient refrigeration equipment that uses natural refrigerants such as ammonia or carbon dioxide, and to control ventilation according to demand.

APPLICABILITY

This BEMP is applicable to all kitchens. Installation of more efficient cooking and refrigeration equipment may only be economically viable when existing equipment is approaching the end of its working life. **Small enterprises** can also fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i54) Specific energy use per dining guest (kWh/dining guest)	(b64) Implementation of a kitchen energy management plan that includes monitoring and reporting of total kitchen energy use normalised per dining guest, and the identification of priority measures to reduce energy consumption.

3.8. CAMPSITES

3.8.1. Environmental education of guests

BEMP is to provide guests with interactive on-site education on environmental issues, including courses, nature trails, or equipment such as low-carbon transport (bicycles, electric bicycles).

APPLICABILITY

This BEMP is applicable to all campsites and other types of accommodation (especially rural). Applicability of this BEMP may be limited for **small enterprises** with few resources.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i55) Environmental information/education available for guests (y/n)	(b65) The accommodation company encourages and facilitates environmentally responsible behaviour and activities, and provides environmental education for guests through on-site activities and courses.
(i56) Low-carbon means of transport (e.g. bicycles) are available for guests (y/n)	

3.8.2. Environmental management of outdoor areas

BEMP is to maximise on-site biodiversity through planting of native species and installation of green or brown roofs and walls. BEMP is to minimise water consumption for irrigation and use grey water or rainwater. BEMP is to minimise light pollution arising from outdoor lighting (e.g. through use of correctly angled low-pressure sodium lamps) and reducing noise pollution from outdoor events by installing sound barriers and enforcing strict curfew rules for such events.

APPLICABILITY

This BEMP is applicable to all campsites and other types of accommodation (especially rural), **small enterprises** included.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i4) Implementation of a biodiversity management plan (y/n)	<p>(b66) Maintain or increase on-site biodiversity by planting native species, creating refuges for local animal species, and installing green or brown roofs where possible; and by minimising chemical inputs, light and noise pollution.</p> <p>(b67) Minimise light pollution and wildlife disturbance by installing timer- or sensor-controlled, efficient, and appropriately angled luminaries for external lights producing zero uplight.</p> <p>(b68) Minimise water consumption by planting native species and mulching, and by installing controlled irrigation systems fed with grey water where possible.</p>

3.8.3. Campsites energy efficiency and renewable energy installation

BEMP is to minimise energy consumption for water-heating, HVAC and lighting by installing low-flow fittings, good building insulation, and fluorescent or LED lighting, and also to install on-site renewable energy generating capacity (e.g. solar water-heating). Additionally, heat may be recovered from washroom grey water using a heat pump.

APPLICABILITY

This BEMP is applicable to all campsites. Installation of specific renewable energy technologies depends on site-specific characteristics. **Small enterprises** can fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i57) Specific energy use per guest-night (kWh/guest-night)	(b69) Specific final energy use (excluding renewable energy generated on-site) is $\leq 2,0$ kWh per guest-night.
(i11) Percentage of final energy use met by renewable energy generated on site (%)	(b70) 100 % of electricity is from traceable renewable electricity sources not already accounted for by another organisation or in the national electricity average generating mix, or that are less than two years old.
(i47) Use of certified renewable energy credits (y/n)	

3.8.4. Campsite water efficiency

BEMP is to minimise water consumption through the installation of low-flow taps and showers, shower-timer controls, and low- and dual-flush WCs and waterless urinals.

APPLICABILITY

This BEMP is applicable to all campsites. **Small enterprises** can fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i23) Water consumption per guest-night (l/guest-night)	(b71) Total water consumption ≤ 94 litres per guest-night on fully serviced four- and five-star campsites, and water consumption ≤ 58 litres per guest-night on all other campsites.
(i25) Flow rates of showers, bathroom taps, urinals and toilet flushes (l/min or l/flush).	

3.8.5. Campsite waste minimisation

BEMP is to minimise residual waste generation by implementing waste prevention, by providing convenient on-site waste sorting facilities, and by contracting waste recycling services.

APPLICABILITY

This BEMP is applicable to all campsites. There is less scope for waste prevention than in other types of accommodation because most waste originates from guest purchases. **Small enterprises** can fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i39) Unsorted waste generated per guest-night (kg/guest-night)	(b72) Total residual waste sent for disposal of $\leq 0,2$ kg per guest-night.

3.8.6. Natural pools

BEMP is to install a natural pool or convert an existing pool to a natural pool.

APPLICABILITY

This BEMP can be implemented in all campsites and other types of accommodation (especially rural).

Small enterprises can fully implement this BEMP.

ASSOCIATED ENVIRONMENTAL PERFORMANCE INDICATORS AND BENCHMARK OF EXCELLENCE

Environmental performance indicator	Benchmarks of excellence
(i58) Installation of a natural pool (y/n)	(b73) The on-site swimming pool(s) incorporate(s) natural plant-based filtration systems to achieve water purification to the required hygiene standard.

4

RECOMMENDED SECTOR SPECIFIC KEY ENVIRONMENTAL PERFORMANCE INDICATORS





The following table lists a **selection** of key environmental performance indicators for organisations in the tourism sector. These are a subset of all the indicators mentioned in chapter 3. The table is divided into six parts; the first one lists indicators **applicable to all**

Indicator	Common unit	Short description	
Cross-Cutting			
1. Implementation of an environmental management system	(y/n)	The indicator states whether the organisation implements an environmental management system. This indicator can be employed by all actors in the tourism sector (i.e. destination managers, tour operators, accommodation providers, food and drink providers, transport operators and activity providers).	
2. Percentage of products and services complying with specific environmental criteria	%	The indicator refers to the assessment of the supply chain, based on selecting products/ services complying with specific environmental criteria and certifications (e.g. EU Ecolabel).	

actors of the sector (cross-cutting), while the following parts are **one for each of the main actors addressed by this SRD (destination managers, tour operators and travel agents, accommodations, restaurant and hotel kitchens and campsites).**

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Cross-Cutting		
Per site (may be aggregated to organisation level)	All	<p>Appropriate indicators are used to continuously monitor all relevant aspects of environmental performance, including less easily measured and indirect aspects such as biodiversity impacts. (BEMP 3.1.1)</p> <p>All staff are provided with information on environmental objectives and training on relevant environmental management actions. (BEMP 3.1.1)</p> <p>Best environmental management practices are implemented where applicable. (BEMP 3.1.1)</p>
Per site (may be aggregated to organisation level)	All	<p>The organisation has applied life cycle thinking to identify improvement options for all major supply chains that impact environmental hotspots. (BEMP 3.1.2)</p> <p>≥ 97 % of chemicals (by active ingredient weight or purchased volume), used in accommodation and restaurant premises are certified according to an ISO Type I ecolabel (or can be demonstrated to be the most environmentally friendly available option). (BEMP 3.1.2)</p> <p>≥ 97 % of all wood, paper and cardboard purchased by accommodations and restaurants are recycled or environmentally certified (ecolabelled, FSC, PEFC). (BEMP 3.1.2)</p>

Indicator	Common unit	Short description
Destination Managers		
1. Implementation of a sustainable destination plan	(y/n)	The indicator states whether the destination manager implements a sustainable destination plan which addresses key environmental challenges within the destination, covers the whole destination area and coordinates all relevant actors involved.
2. Implementation of a biodiversity management plan	(y/n)	The indicator refers to the implementation of a biodiversity management plan at the destination.
3. Daily water consumption per guest	L/guest-day	Amount of water used on average by each guest at the destination site.
4. Percentage of waste water sent to secondary or tertiary treatment	%	Percentage of waste water generated at the destination which is treated with secondary or tertiary treatment during tourism high season.
5. Percentage of municipal solid waste sent for recycling or anaerobic digestion	%	Percentage of municipal solid waste collected at the destination which is sent for recycling or anaerobic digestion.
6. Percentage of journeys made by public transport, walking and cycling within the destination by tourists	(y/n)	Percentage of journeys within a destination made by public transport, walking and cycling by tourists.
7. Percentage of final energy demand met by renewable energy generated on site	(y/n)	Ratio between the renewable energy generated on site in the destination and the total energy demand of the destination in terms of final energy.

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Destination Managers		
Destination	All	Implementation of a destination plan that: (i) covers the entire destination area; (ii) involves coordination across all relevant government and private actors; (iii) addresses key environmental challenges within the destination. (BEMP 3.2.1)
Destination	All	Minimise and compensate for any biodiversity displaced by tourism development so that destination- level biodiversity is maintained or increased in high nature value areas, and increased in degraded areas. (BEMP 3.2.2)
Destination	Water	Average tourist water consumption \leq 200 litres per guest-day. (BEMP 3.2.3)
Destination	Water	Services, including public transport, water provision, waste water treatment and waste recycling, are designed to cope with peak demand and to ensure the sustainability of tourism within the destination. (BEMP 3.2.3) \geq 95 % waste water generated in the destination receives at least secondary treatment, or tertiary treatment for discharge to sensitive receiving waters, including during peak tourist season. (BEMP 3.2.3)
Destination	Waste	\geq 95 % of municipal solid waste is diverted from landfill and sent for recycling or anaerobic digestion. (BEMP 3.2.3)
Destination	Emissions	Services, including public transport, water provision, waste water treatment and waste recycling, are designed to cope with peak demand and to ensure the sustainability of tourism within the destination. (BEMP 3.2.3) Public transport, walking and cycling account for \geq 80 % of journeys made by tourists within city destinations. (BEMP 3.2.3)
Destination	Emissions	— (BEMP 3.2.3)

Indicator	Common unit	Short description	
Tour Operators And Travel Agents			
1. Specific transport GHG emissions	kg CO ₂ /passenger-km	Fuel/energy consumption of aircraft, buses, coaches and trains under the control of tour operators are monitored and data for subcontracted transport providers are requested.	
2. Percentage of transport GHG emissions offset with certified carbon credits	%	Percentage of CO ₂ emissions offset by purchased certified carbon credits. For aviation emission offsetting, an appropriate radiative forcing index factor should be applied.	
3. Percentage of accommodation suppliers (by guest- nights or value sold) complying with specific environmental criteria	%	This indicator considers third- party certified environmental standards (e.g. EU Ecolabel, Nordic Swan) as well as compliance with specified set of requirements.	
4. Percentage of services under environmental improvement within the destination	%	The indicator refers to the percentage of services that the tour operator has contributed to improve within each of its major destinations.	

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Tour Operators And Travel Agents		
Organisation aircraft/ vehicle fleet	Energy efficiency Material efficiency Emissions	<p>Tour operators do not offer flights for: (i) destinations less than 700 km away; (ii) destinations up to 2 000 km away for a stay of less than eight days, or; destinations more than 2 000 km away for a stay of less than 14 days. (BEMP 3.3.1)</p> <p>Tour operator airline fleets achieve an average specific fuel consumption of $\leq 2,7$ litres per 100 passenger-km. (BEMP 3.3.1)</p> <p>Average coach or bus fleet fuel consumption of $\leq 0,75$ litres per 100 passenger-km and at least 90 % of fleet are EURO V-compliant or run on alternative fuel systems. (BEMP 3.3.1)</p>
Organisation aircraft/ vehicle fleet	Energy efficiency Material efficiency Emissions	Transport GHG emissions from all packages sold are automatically compensated by investing directly in GHG avoidance projects or by purchasing certified carbon credits. (BEMP 3.3.1)
Organisation	All	≥ 90 % of accommodation suppliers, based on sales value or overnight stays, are in compliance with a set of environmental requirements (preferably recognised by third-party certification). (BEMP 3.3.2)
Destination and organisation	All	The tour operator drives environmental improvement by: (i) improving supply chain performance; (ii) influencing destination management; (iii) direct improvement schemes. (BEMP 3.3.3)

Indicator	Common unit	Short description
Tour Operators And Travel Agents		
5. Percentage of front-runner sustainable tours (e.g. ecolabelled) sold (by value)	%	The percentage by value of front-runner sustainable tours (e. g. Austrian ecolabel for travel packages) out of total tours sold by the tour operator.
6. Paper consumption per customer	g/customer	The amount of paper used per customer.
7. Environmental certification of paper and printing	(y/n)	This indicator refers to whether paper used is environmentally certified (e.g. EU Ecolabel, FSC), and has been printed using environmentally certified printing services.
8. Specific CO ₂ emissions from office and retail operations	kg CO ₂ /customer kg CO ₂ /m ² -yr	This indicator measures the amount of CO ₂ arising from retail and office activities. It can be expressed as emissions per customer or emissions per retail and office surface and year.
9. Annual water consumption in office buildings per employee	L/employee-yr	This indicator refers to the annual water use in the office buildings divided by the number of employees working in such buildings.

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Tour Operators And Travel Agents		
Organisation	All	<p>The tour operator promotes sustainable tourism packages in mainstream advertising material. (BEMP 3.3.4)</p> <p>Front-runner sustainable tourism packages (e.g. Austrian ecolabel for travel packages) represent a sales share $\geq 10\%$. (BEMP 3.3.4)</p> <p>The tour operator employs effective marketing and communication methods to encourage more sustainable choices in the selection of tourism packages. (BEMP 3.3.4)</p> <p>The tour operator provides all its customers with destination-specific and awareness-raising information to promote sustainable behaviour at the destination. (BEMP 3.3.4)</p>
Organisation	Material efficiency Waste Emissions	Hard copy office and promotional material: (i) is avoided wherever possible; (ii) uses 100% recycled or environmentally certified (e.g. ecolabelled, FSC, PEFC) paper; (iii) is printed by environmentally certified (e.g. EMAS, ISO14001) printing services. (BEMP 3.3.5)
Organisation	Material efficiency Waste	Hard copy office and promotional material: (i) is avoided wherever possible; (ii) uses 100% recycled or environmentally certified (e.g. ecolabelled, FSC, PEFC) paper; (iii) is printed by environmentally certified (e.g. EMAS, ISO14001) printing services. (BEMP 3.3.5)
Organisation	Emissions	Energy and GHG management plans are implemented and energy and GHG emissions arising from retail and office activities are reported and expressed per m ² of retail and office space per year, and per customer. (BEMP 3.3.5)
Organisation	Water	Water consumption $\leq 2,0$ m ³ per employee per year. (BEMP 3.3.5)

Indicator	Common unit	Short description	
Accommodations			
1. Water consumption per guest-night	l/guest-night	<p>Water consumption is measured on the accommodation premises over one year, normalised per number of guest-nights.</p> <p>Water consumption for large swimming pools or restaurants serving a high proportion of non-residents may be excluded from the indicator for accommodation benchmarking.</p>	
2. Laundry mass generated per guest-night	kg laundry/guest-night	Total laundry mass generated per guest-night. This indicator is influenced by reuse rate, textile quantity, size and density.	
3. Consumption of chemical products for cleaning and dishwashing in terms of active chemical ingredients per guest-night	g/guest-night	This indicator includes all chemicals products for cleaning and dishwashing (excluding laundry detergents, special cleaners and pool chemicals). The amount to be reported is in terms of active chemical ingredients.	
4. Percentage of ISO Type I ecolabelled chemicals and textiles	%	Percentage of ISO Type I ecolabelled chemicals (for cleaning operations, soaps, shampoos, etc.) and textiles used.	
5. Water consumption per kg of laundry	L/kg laundry	This indicator measures the water consumption for the complete wash cycle per kg of laundry.	

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Accommodations		
<p>Per hotel or equivalent (may be aggregated to organisation level)</p> <p>Sub-metering of accommodation areas</p>	Water	<p>Implementation of a site-specific water management plan that includes: (i) sub-metering and benchmarking all major water-consuming processes and areas; (ii) regular inspection and maintenance of water system 'leak points' and appliances. (BEMP 3.4.1)</p> <p>Total water consumption \leq 140 L per guest-night in fully serviced hotels, and \leq 100 L per guest-night in accommodation where the majority of the bathrooms are shared across rooms (e.g. hostels). (BEMP 3.4.1)</p>
Per premises	Water Energy efficiency	Reduction in laundry achieved through reuse of towels and bedclothes of at least 30 %. (BEMP 3.4.3)
Per premises	Waste	Consumption of chemicals products for cleaning and dishwashing (excluding laundry detergents, special cleaners and pool chemicals) \leq 10 grams of active chemical ingredients per guest-night. (BEMP 3.4.3)
Per premises	Waste	At least 80 % (by active ingredient weight or purchased volume) of all-purpose cleaners, sanitary detergents, soaps and shampoos used by the tourist accommodation have been awarded an ISO Type I ecolabel (e.g. EU Ecolabel). (BEMP 3.4.3)
Per laundry used by the accommodation	Water	<p>For small scale laundry operations, all new domestic washing machines have an EU energy label rating of A+++, and commercial washing machines have an average laundry water consumption \leq 7 L per kg of laundry washed.</p> <p>Total water consumption over the complete wash cycle of large-scale laundry operations \leq 5 L per kg textile for accommodation laundry and \leq 9 L per kg textile for restaurant laundry. (BEMP 3.4.5).</p>

Indicator	Common unit	Short description
Accommodations		
6. Energy consumption per kg of laundry	kWh/kg laundry	This indicator measures the energy consumption for the complete wash cycle per kg of laundry.
7. Percentage of ecolabelled laundry detergents	%	Percentage of ecolabelled detergents used in laundry operations.
8. Ecolabelled laundry service	(y/n)	This indicator refers to the contracting of an external provider of laundry services compliant with an ISO Type I ecolabel.
9. Implementation of a pool environmental management plan	(y/n)	The implementation of a pool environmental management plan includes water, energy and chemical monitoring.
10. Implementation of grey water or rainwater recycling	(y/n)	This indicator states whether a system that employs grey water for internal or external (e.g. irrigation) purposes, or that uses rainwater for interior purposes (e.g. flushing toilets) is installed and used.
11. Waste generation per guest-night	kg/guest-night	This indicator refers to total waste generation (sorted plus unsorted). The purpose is to assess the effectiveness of waste prevention measures (e.g. reuse).

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Accommodations		
Per laundry used by the accommodation	Energy efficiency	<p>Total on-site small-scale laundry process energy consumption $\leq 2,0$ kWh per kg textile for dried and finished laundry products. (BEMP 3.4.4).</p> <p>Total process energy consumption for dried and finished large-scale laundry products $\leq 0,90$ kWh per kg textile for accommodation laundry and $\leq 1,45$ kWh per kg textile for restaurant laundry. (BEMP 3.4.5)</p>
Per laundry used by the accommodation	Waste	At least 80 % of the small-scale laundry detergents used (by active ingredient weight or purchased volume) have been awarded an ISO Type I ecolabel (e.g. Nordic Swan, Blaue Engel, EU Ecolabel). (BEMP 3.4.4).
Per laundry services provider used by the accommodation	Water Energy efficiency	All outsourced laundry is carried out by a provider who has been awarded an ISO Type I ecolabel (e.g. Nordic Swan), and all in-house large-scale laundry operations, or laundry operations outsourced to non-certified service providers, comply with the relevant benchmarks. (BEMP 3.4.5)
Per premises	Water Energy efficiency Material efficiency	Implementation of an efficiency plan for swimming pool and spa areas that includes: (i) benchmarking specific water, energy and chemical consumption in swimming pool and spa areas, expressed per m ² of pool surface area and per guest-night; (ii) minimisation of chlorine consumption through optimised dosing and use of supplementary disinfection methods such as ozonation and UV treatment. (BEMP 3.4.6)
Per premises At organisation level: % of premises	Water	Installation of a rainwater recycling system that supplies internal water demand, and/or a grey water recycling system that supplies internal or external water demand. (BEMP 3.4.7)
At least per hotel or equivalent (may be aggregated to organisation level) Per source area (e.g. kitchen, housekeeping)	Waste Material efficiency	Total waste generation (sorted plus unsorted) $\leq 0,6$ kg per guest-night. (BEMP 3.5.1)

Indicator	Common unit	Short description	
Accommodations			
12. Percentage of waste sent for recycling	%	This indicator expresses the amount of waste (expressed on a weight basis) which is separately collected and sent for recycling.	
13. Unsorted waste generated per guest-night	kg/guest-night	This indicator measures the amount of unsorted waste (not sent for recycling) generated.	
14. Removal efficiency of on-site waste water treatment	% of BOD ₅ , COD, total nitrogen, total phosphorus removal BOD ₅ , COD, total nitrogen, total phosphorus concentration in final effluent (mg/L)	This indicator refers to the performance of on-site waste water treatment systems (when present).	
15. Implementation of a site-specific energy management plan	(y/n)	The indicator states whether a site-specific energy management plan which includes sub-metering all major energy-consuming processes is implemented and whether primary energy consumption and energy-related CO ₂ emissions are calculated and reported.	
16. Specific energy use	kWh/m ² -yr	<p>Total energy use per unit of area and per year in terms of final energy.</p> <p>Renewable energy generated on-site should not be subtracted.</p> <p>In cases where heating and cooling energy can be separated from other process energy, it is recommended to report them separately.</p>	

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Accommodations		
Per hotel or equivalent (may be aggregated to organisation level)	Waste Material efficiency	At least 84 % of waste, expressed on a weight basis, is sent for recycling. (BEMP 3.5.2)
Per hotel or equivalent (may be aggregated to organisation level)	Waste Material efficiency	Unsorted waste sent for disposal is ≤ 0,16 kg per guest-night. (BEMP 3.5.2)
Per hotel or equivalent	Waste Water	Where it is not possible to send waste water for centralised treatment, on-site waste water treatment includes pretreatment (sieve/bar-rack, equalisation and sedimentation) followed by biological treatment with > 95 % BOD ₅ removal, > 90 % nitrification, and (off-site) anaerobic digestion of excess sludge. (BEMP 3.5.3)
Per hotel or equivalent and at the organisational level (aggregated value)	Energy efficiency	Implementation of a site-specific energy management plan that includes: (i) sub-metering and benchmarking all major energy-consuming processes; (ii) calculation and reporting of primary energy consumption and energy-related CO ₂ emissions. (BEMP 3.6.1)
Per hotel or equivalent and at the organisational level (aggregated value)	Energy efficiency	<p>For existing buildings, final energy use for HVAC (heating, ventilation and air conditioning) and water heating ≤ 75 kWh, or total final energy use ≤ 180 kWh, per m² heated and cooled area per year. (BEMPs 3.6.1, 3.6.2 and 3.6.3)</p> <p>For new buildings, the rated energy performance conforms with Minergie P or PassiveHouse standards or equivalent. (BEMP 3.6.2 and 3.6.3)</p> <p>Water-source heat pumps and/or geothermal heating/cooling are used in preference to conventional heating and cooling systems wherever feasible, and heat pumps comply with EU Ecolabel criteria. (BEMP 3.6.4)</p> <p>Total electricity use ≤ 80 kWh m²yr (heated and cooled floor area). (BEMP 3.6.5)</p>

Indicator	Common unit	Short description	
Accommodations			
17.Installed lighting capacity	W/m ²	<p>Installed lighting power to meet illumination needs per unit of area.</p> <p>An alternative good technical indicator is Lumens/m², but the environmental performance is more linked to the installed power measured in W/m².</p>	
18.Percentage of final energy use met by renewable energy generated on site	%	Ratio between the renewable energy generated on site at the accommodation facility and the total energy use of the facility in terms of final energy.	
19.Use of certified renewable energy credits	(y/n)	<p>This indicator expresses if the accommodation purchases off- site certified renewable energy (e.g. renewable electricity).</p> <p>The certification must ensure that the renewable energy purchased is not already accounted for by another organisation or in the national electricity average generating mix.</p>	

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Accommodations		
Per hotel or equivalent	Energy efficiency	<p>Installed lighting capacity ≤ 10 W per m². (BEMP 3.6.5)</p> <p>Lighting electricity use ≤ 25 kWh/m²yr (heated and cooled floor area). (BEMP 3.6.5)</p> <p>Total electricity consumption ≤ 80 kWh m²yr (heated and cooled floor area). (BEMP 3.6.5)</p>
Per hotel or equivalent and at the organisational level (aggregated value)	Energy efficiency	The equivalent of 50 % of the accommodation's annual energy use is generated by on-site renewable sources. (BEMP 3.6.6)
Per hotel or equivalent and at the organisational level (aggregated value)	Energy efficiency	100 % of electricity is from traceable renewable electricity sources not already accounted for by another organisation or in the national electricity average generating mix, or that are less than two years old. (BEMP 3.6.6)

Indicator	Common unit	Short description
Restaurants And Hotel Kitchens		
1. Percentage of environmentally certified ingredients (by value)	%	This indicator refers to ingredients certified with relevant environmental standards (e.g. organic, MSC).
2. Organic waste generation per dining guest	kg/dining guest	Total organic waste generated divided by the number of covers (dining guests) served.
3. Percentages of organic waste sent for anaerobic digestion, alternative energy recovery, composted on-site or sent for composting	%	Restaurants and hotel kitchens should report separately the amounts of organic waste sent for anaerobic digestion, alternative energy recovery, composted on-site or sent for composting, as percentages of the total organic waste generation.
4. Kitchen water consumption per dining guest	L/dining guest	Ratio of the total kitchen water consumption by the number of covers (dining guests) served. Numerous processes contribute to water consumption, and ideally monitoring should be at process level (dishwashing, taps, steam cookers, etc.).
5. Percentage of ecolabelled dishwashing and kitchen cleaning chemicals	%	This indicator reports the percentage of dishwashing and kitchen cleaning chemical products which are ISO Type I ecolabelled.
6. Specific energy use per dining guest	kWh/dining guest	Total energy use for the kitchen divided by the number of covers. This indicator includes all energy sources (e.g. electricity, natural gas, LPG). Many processes contribute to energy consumption, and ideally monitoring should be at process level (cooking, refrigeration, dishwashing, etc.).

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Restaurants And Hotel Kitchens		
Per key ingredient purchased, (may be aggregated to organisation level)	All	<p>The organisation is able to provide documented information, at least including country of origin, for all main ingredients. (BEMP 3.7.1)</p> <p>At least 60 % of food and drink products, by procurement value, are environmentally certified (e.g. organic). (BEMP 3.7.1)</p>
Per kitchen or hotel (may be aggregated to organisation level)	Waste Material efficiency	Total organic waste generation ≤ 0,25 kg per dining guest, and avoidable waste generation ≤ 0,18 kg per dining guest. (BEMP 3.7.2)
Per kitchen or hotel (may be aggregated to organisation level)	Waste Material efficiency	≥ 95 % of organic waste is separated and diverted from landfill, and, where possible, sent for anaerobic digestion or alternative energy recovery. (BEMP 3.7.2)
At least per kitchen or hotel (may be aggregated to organisation level) Per process	Water Energy efficiency	Implementation of a kitchen water management plan that includes monitoring and reporting of total kitchen water consumption normalised per dining guest, and the identification of priority measures to reduce water consumption. (BEMP 3.7.3)
Per premises	Waste	At least 70 % of the purchase volume of chemical cleaning products (excluding oven cleaners) for dishwashing and cleaning are ecolabelled (e.g. EU Ecolabel). (BEMP 3.7.3)
At least per kitchen or hotel (may be aggregated to organisation level) Per process	Energy efficiency	Implementation of a kitchen energy management plan that includes monitoring and reporting of total kitchen energy use normalised per dining guest, and the identification of priority measures to reduce energy consumption. (BEMP 3.7.4)

Indicator	Common unit	Short description
Campsites		
1. Environmental information/ education available for guests (y/n)	(y/n)	This indicator relates to the availability of e.g. information on low-impact mobility options (e.g. bikes, public transport, electric vehicles), the provision of courses addressing environmental issues and nature walks.
2. Implementation of a biodiversity management plan	(y/n)	The indicator refers to the implementation of a biodiversity management plan at the campsite.
3. Specific energy use per guest-night	kWh/guest-night	Total energy use on the campsite per guest-night in terms of final energy. It must be clearly stated whether renewable energy generated on- site is included or not in the figure and this may also be expressed separately anyway. Energy used within buildings and kitchens may also be expressed separately as kWh/m ² -yr and kWh/ dining guest.
4. Percentage of final energy use met by renewable energy generated on site	%	This indicator is calculated as the percentage of the final energy used that is supplied by on- site renewable energy generation.

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Campsites		
Per campsite	All	The accommodation company encourages and facilitates environmentally responsible behaviour and activities, and provides environmental education for guests through on-site activities and courses. (BEMP 3.8.1)
Per campsite	Biodiversity	<p>Maintain or increase on-site biodiversity by planting native species, creating refuges for local animal species, and installing green or brown roofs where possible, and by minimising chemical inputs, light and noise pollution. (BEMP 3.8.2)</p> <p>Minimise light pollution and wildlife disturbance by installing timer- or sensor-controlled, efficient, and appropriately angled luminaries for external lights producing zero uplight. (BEMP 3.8.2)</p> <p>Minimise water consumption by planting native species and mulching, and by installing controlled irrigation systems fed with grey water where possible. (BEMP 3.8.2)</p>
Per campsite (may be aggregated to organisation level) Per process	Energy efficiency	Specific final energy use (excluding renewable energy generated on-site) is $\leq 2,0$ kWh per guest-night. (BEMP 3.8.3)
Per campsite (may be aggregated to organisation level) Per process	Energy efficiency	– (BEMP 3.8.3)

Indicator	Common unit	Short description	
Campsites			
5. Use of certified renewable energy credits	(y/n)	<p>This indicator expresses if the accommodation purchases off- site certified renewable energy (e.g. renewable electricity).</p> <p>The certification must ensure that the renewable energy purchased is not already accounted for by another organisation or in the national electricity average generating mix.</p>	
6. Water consumption per guest-night	L/guest-night	<p>Water consumption is measured on the campsite premises over one year, and divided by the number of guest-nights.</p> <p>Water consumption for large swimming pools or restaurants serving a high proportion of non-residents may be excluded from this indicator for accommodation benchmarking.</p>	
7. Unsorted waste generated per guest-night	kg/guest-night	This indicator measures the amount of unsorted waste generated.	

Recommended minimum level of monitoring	Related core indicator according to Annex IV to Regulation (EC) 1221/2009 (Section C.2)	Benchmark of excellence and related best environmental management practice
Campsites		
Per campsite (may be aggregated to organisation level) Per process	Energy efficiency	100 % of electricity is from traceable renewable electricity sources not already accounted for by another organisation or in the national electricity average generating mix, or that is less than two years old. (BEMP 3.8.3)
Per campsite (may be aggregated to organisation level)	Water	Total water consumption of ≤ 94 litres per guest- night on fully serviced four- and five-star campsites, and water consumption of ≤ 58 litres per guest- night on all other campsites. (BEMP 3.8.4)
At least per campsite or equivalent (may be aggregated to organisation level)	Waste Material efficiency	Total residual waste sent for disposal of $\leq 0,2$ kg per guest-night. (BEMP 3.8.5)

COMMISSION DECISION (EU) 2016/611

of 15 April 2016

on the reference document on best environmental management practice, sector environmental performance indicators and benchmarks of excellence for the tourism sector under Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco- management and audit scheme (EMAS)

(notified under document C(2016) 2137)
(Text with EEA relevance)

The European Commission

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC (1), and in particular Article 46(1) thereof,

Whereas:

1. Regulation (EC) No 1221/2009 establishes an obligation for the Commission to develop sectoral reference documents for specific economic sectors in consultation with Member States and other stakeholders. These sectoral reference documents are necessary to help organisations to better focus on the most important environmental aspects in a given sector and allow evaluating, reporting and improving the organisations' environmental performance. They must include best environmental management practice, environmental performance indicators and, where appropriate, benchmarks of excellence and rating systems identifying environmental performance levels in those sectors.
2. 'Communication from the Commission – Establishment of the working plan setting out an indicative list of sectors for the adoption of sectoral and cross-sectoral reference documents, under Regulation (EC) No 1221/2009 on the voluntary participation of organisations in a Community eco-management and audit scheme (EMAS)' ⁽²⁾ sets out a working plan and an indicative list of priority sectors for the adoption of sectoral and cross-sectoral reference documents, including the tourism sector.
3. The measures provided for in this Decision are in accordance with the opinion of the Committee established pursuant to Article 49 of Regulation (EC) No 1221/2009,

⁽¹⁾ OJ L 342, 22.12.2009, p. 1

⁽²⁾ OJ C 358, 8.12.2011, p. 2.

Has Adopted This Decision

Article 1

The sectoral reference document on best environmental management practice, sector environmental performance indicators, and benchmarks of excellence for the tourism sector is set out in the Annex.

Article 2

EMAS-registered organisations in the tourism sector shall take this sectoral reference document into account and should therefore:

- use relevant elements of the sectoral reference document when developing and implementing their environmental management system in light of the Environmental Reviews,
- demonstrate in their environmental statements how the relevant sector-specific Environmental Performance Indicators, the Best Environmental Management Practices and Benchmarks of Excellence described in the sectoral reference document have been used to identify measures and actions, and possibly to set priorities, for improving their environmental performance.

Article 3

Meeting the benchmarks of excellence identified in the sectoral reference document is not mandatory for EMAS- registered organisations since the voluntary character of EMAS leaves the assessment of the feasibility of the benchmarks, in terms of costs and benefits, to the organisations themselves.

This Decision is addressed to the Member States.

Done at Brussels, 15 April 2016.

For the Commission
Karmenu VELLA
Member of the Commission



Publications Office