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**THEMATIC2GREEN**

# **ENVIRONMENTAL QUALITY MANAGEMENT IN TOURISM SECTOR**

Report 3: Environmental Quality Management  
and Certification in the Tourism Sector – Local  
Needs, Survey Findings and ISO 14001  
Framework

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## Executive Summary

The tourism and hospitality sector in Niš and the Municipality of Medijana already has a basic foundation for environmental improvement, but it has not yet developed a systematic approach to environmental quality management and certification. Many businesses apply individual environmental measures in daily operations, especially those connected with energy saving, water saving and local food sourcing. However, these practices are mostly informal and are not yet supported by structured environmental policies, responsible persons, regular monitoring, staff training or certification procedures.

Tourism activities create a wide range of environmental pressures. These include energy consumption, water use, wastewater generation, solid waste, food waste, packaging waste, air emissions, transport-related impacts, procurement impacts and pressure on local infrastructure. These issues are especially relevant in urban tourism destinations such as Niš and Medijana, where hospitality businesses, accommodation providers, cultural institutions, public services and transport operate in a dense urban environment.

The survey findings show that local businesses have already completed the first and easiest phase of the green transition. A high share of respondents apply energy-saving measures, while many also use water-saving measures and environmentally friendly alternatives for guests. Local food sourcing is one of the strongest existing sustainable practices in the hospitality sector. At the same time, food waste management, formal environmental planning, staff training and certification readiness remain weak areas. Awareness of environmental certification schemes is low, and only a small number of businesses have taken concrete steps toward certification.

The main barriers are financial limitations, lack of knowledge and training, insufficient technical support, weak public-private cooperation and limited customer demand for green services. These barriers are particularly important because the local sector is dominated by micro and small enterprises, especially restaurants and cafés. For these businesses, environmental measures must be simple, practical, affordable and directly connected with daily operations.

ISO 14001 is relevant as a framework for moving from isolated environmental measures toward systematic environmental management. The standard supports organisations in identifying environmental aspects, defining responsibilities, setting objectives, monitoring performance, ensuring compliance and achieving continual improvement. It is applicable to different types of organisations and can be adapted to the size, nature and complexity of tourism and hospitality businesses.

For hotels, restaurants, cafés, accommodation providers and tourism services, ISO 14001 can help structure existing practices and introduce a clearer management system. Practical application may include monitoring energy and water consumption, reducing food waste, separating waste, managing used cooking oil, improving procurement, training employees, informing guests and controlling emissions, wastewater and other environmental aspects.

The report recommends a gradual approach. Private sector entities should begin with basic environmental governance: a simple environmental policy, an appointed responsible person, monitoring of energy, water and waste, staff training and practical operational improvements. Public sector entities should support this process through financial incentives, technical assistance, training, simple guidance documents, local recognition mechanisms and stronger cooperation platforms.

As the final phase, a thematic workshop on **Environmental Quality Management and Certification in the Tourism Sector** will be organised. The workshop will present the key findings, explain the relevance of ISO 14001 and other certification schemes, discuss barriers and support needs, and define practical next steps for local tourism and hospitality businesses.

Overall, the Municipality of Medijana and the wider City of Niš have a clear basis for further development of environmental quality management in tourism. The priority is to transform existing individual practices into a structured, supported and measurable system that can lead to stronger environmental performance, reduced operational costs, improved competitiveness and gradual certification readiness.

## Introduction

Environmental quality management has become an increasingly important issue for the tourism sector, particularly in destinations where tourism development is closely connected with cultural heritage, natural resources, urban infrastructure and local community well-being. Tourism activities depend heavily on the quality of the surrounding environment, while at the same time they generate pressures related to energy use, water consumption, waste generation, transport, land use and seasonal concentration of visitors.

This report has been prepared within the framework of the project **“Thematic innovation capacity toward green development – THEMATIC2GREEN – IPA-ADRION00228”**, under **Work Package 1: Promotion of environmental quality certification of public and private services**. The wider objective of this work package is to support the improvement of environmental quality certification and environmental management practices among public and private actors whose activities are based on cultural and natural heritage. The project documentation identifies **Activity 1.1** as an analysis of needs and potentials for improving environmental quality management of public and private bodies in running economic activities connected with cultural and natural heritage.

The tourism sector is particularly relevant for this type of analysis because it involves a wide range of actors, including accommodation providers, restaurants and cafés, travel agencies, tour operators, destination managers, cultural institutions and supporting services. These actors directly or indirectly influence the environment through daily operations, procurement, energy and water use, food preparation, guest transport, waste management and the maintenance or development of tourism infrastructure. For this reason, environmental quality management in tourism cannot be treated as a single isolated measure, but as a structured process that links operational efficiency, legal compliance, environmental responsibility and long-term competitiveness.

The first part of this report builds on the previous analysis of environmental quality management in the tourism sector. It presents the general environmental challenges of tourism, the relevant legal and local framework, and the best environmental management practices applicable to tourism-related activities. Special attention is given to the local context of the City of Niš and the Municipality of Medijana, where tourism development is connected with urban services, hospitality, cultural heritage, transport infrastructure and increasing environmental pressures. The existing analysis points to key topics such as air pollution, waste management, water use, wastewater, biodiversity, energy consumption and the need for stronger environmental certification systems.

The second part of the report is based on the survey findings collected from tourism and hospitality stakeholders in the territory of Niš, with a focus on the central Municipality of Medijana. The survey provides practical insight into the current level of environmental practices, awareness of certification schemes, barriers to implementation and preferred forms of support. It shows that many businesses have already introduced basic measures such as energy-saving practices, water-saving devices or local food sourcing, but that formal environmental management structures and certification readiness remain weak. The survey also confirms that financial limitations, lack of knowledge and insufficient technical support are among the main obstacles faced by local businesses.

The third part of the report introduces **ISO 14001** as a structured framework for environmental management in tourism and hospitality. ISO 14001 is relevant because it provides a systematic approach for identifying environmental aspects, managing legal and other compliance obligations, setting environmental objectives, monitoring performance and ensuring continual improvement. The source material on ISO 14001 highlights that the standard can be applied by different types of organizations, regardless of their size, type or nature of activity, and that it supports better resource management, reduced environmental impacts, improved reputation and stronger compliance with environmental requirements.

The purpose of this report is therefore to connect three elements into one coherent document: the general environmental management framework for tourism, the local survey-based needs assessment, and the ISO 14001 approach as a practical management and certification pathway. The report does not treat certification as an isolated administrative requirement, but as a tool for improving daily operations, reducing costs, strengthening environmental responsibility and preparing tourism businesses for future market and regulatory expectations.

Finally, the report will define the final phase of the process: the organization of a thematic workshop on environmental quality management and certification in the tourism sector. This workshop will serve as a platform for presenting the key findings, discussing barriers and opportunities with local stakeholders, and introducing practical steps toward improved environmental management and certification readiness.

## Environmental Quality Management in the Tourism Sector

The tourism sector is highly dependent on natural resources, cultural heritage, local infrastructure and the quality of the surrounding environment. At the same time, tourism activities generate a wide range of environmental pressures through accommodation, food and beverage services, transport, visitor movements, recreational activities, construction, maintenance and supply chains. For this reason, environmental quality management in tourism requires an integrated approach that covers both direct and indirect environmental aspects.

Tourism-related activities can affect the environment through excessive use of resources, generation of waste and wastewater, air emissions, pressure on biodiversity and increased demand for water and energy. These pressures are particularly visible in destinations with high visitor numbers, seasonal peaks, limited infrastructure capacity or sensitive natural and cultural assets. Effective management therefore requires coordinated action by public authorities, private businesses, tourism operators, visitors and local communities.

One of the main challenges in the tourism sector is **overcrowding and resource depletion**. Over-tourism can place strong pressure on local ecosystems, water supply systems and energy resources. It can also increase the amount of solid waste, plastic waste, sewage and other forms of pollution. Sensitive natural environments, such as forests, protected areas, coastal zones, rivers, mountains and wildlife habitats, can be particularly exposed to damage when tourism is not properly planned or controlled.

Another important challenge is **habitat destruction and biodiversity loss**. Tourism infrastructure, including hotels, resorts, roads, parking areas, trails and supporting facilities, may lead to land take, deforestation, soil degradation, erosion and disturbance of wildlife. Tourism activities may also disturb animals through noise, movement of visitors, marine

activities, safari tourism or other forms of recreation. In some cases, tourism can contribute to the introduction or spread of invasive species.

**Pollution and waste management** represent a central environmental issue for tourism destinations. Air pollution can arise from flights, cruise ships, buses, cars and other transport activities. Water pollution can result from hotels, restaurants, recreational facilities, wastewater discharge and insufficient treatment systems. Solid waste, especially plastic, packaging and food waste, may exceed the capacity of local collection and disposal systems during peak seasons. In tourism hotspots, waste is often generated in concentrated periods and locations, which increases pressure on municipal services and can damage the image and environmental quality of the destination.

Water use is also a major concern. Tourism facilities, particularly hotels, restaurants, swimming pools, spas, laundry services and landscaped areas, can consume large quantities of water. In regions affected by seasonal droughts, water stress or limited freshwater resources, tourism demand may compete with the needs of local residents and other economic activities. Some water uses, such as toilet flushing, irrigation, washing and cleaning, do not necessarily require potable water. Therefore, rainwater harvesting, greywater reuse and water-efficient equipment can significantly reduce pressure on freshwater supply systems.

Energy consumption is another key aspect of environmental quality management in tourism. Accommodation and hospitality services use energy for heating, ventilation, air conditioning, lighting, cooking, washing, water heating, swimming pools, spas and other technical systems. Energy monitoring and management can lead to immediate savings by identifying unnecessary consumption and basic corrective measures. The previous analysis notes that energy monitoring and management can typically lead to energy savings of around 10% through the identification of basic corrective actions.

Tourism is also connected with **climate change impacts**. The sector contributes to greenhouse gas emissions, especially through transport, energy use and supply chains. At the same time, tourism destinations are exposed to the consequences of climate change, including higher temperatures, heatwaves, extreme weather events, water scarcity, changing seasonal patterns and increased pressure on infrastructure. These impacts can affect visitor comfort, operating costs, outdoor activities, food supply, water availability and the overall attractiveness of destinations.

A further issue is the lack of sustainable practices, weak implementation of environmental policies and limited adoption of formal environmental management systems. In some destinations, environmental rules exist but are not fully enforced. In other cases, businesses may promote sustainability without strong evidence or measurable results, which creates the risk of greenwashing. Certification schemes and environmental management standards can help reduce this risk by introducing clearer criteria, third-party verification, structured monitoring and continual improvement.

Environmental quality management in tourism also includes the management of **indirect environmental aspects**. Direct environmental aspects are those under the full control of an organization, such as energy use in a hotel, water consumption in a restaurant, waste separation in a facility or the use of cleaning chemicals. Indirect aspects are those over which an organization does not have full control, but can still influence them through procurement, supplier selection, information to guests, cooperation with partners and communication with local authorities. These may include transport choices, food supply chains, guest behaviour, outsourced laundry, construction works or waste treatment services.

Because tourism includes accommodation providers, food and beverage services, tour operators, travel agencies, destination managers and supporting services, environmental improvement must be gradual and cross-sectoral. Some measures apply to almost all

tourism actors, such as energy efficiency, water saving, waste reduction, staff training and green procurement. Other measures are more specific, such as towel and linen reuse in hotels, food waste reduction in restaurants, low-impact transport in tour operations, or biodiversity management at the destination level.

In this context, environmental quality certification can play an important role. Certification systems such as ISO 14001, Green Key, EMAS, EarthCheck or GSTC-based schemes can help tourism actors demonstrate environmental responsibility, improve operational control, reduce resource consumption and increase credibility with visitors, public authorities and partners. However, certification should not be seen only as a formal label. Its real value lies in establishing a systematic approach to identifying environmental impacts, setting objectives, implementing measures, monitoring results and improving performance over time.

For public actors, environmental quality management means creating policies, infrastructure, incentives and support mechanisms that allow tourism businesses to improve their environmental performance. This includes waste and wastewater systems, public transport, local environmental planning, biodiversity protection, green public procurement, awareness campaigns and support for certification. For private actors, it means improving daily operations, training employees, reducing waste and resource consumption, choosing responsible suppliers and communicating environmental measures transparently to guests.

Therefore, the tourism sector requires a practical and structured environmental management approach that combines legal compliance, best environmental management practices, local needs, business capacities and certification frameworks. The following sections present the legal and local environmental framework, best practices in tourism, survey findings from local stakeholders and the relevance of ISO 14001 as a tool for systematic environmental management and certification readiness.

## Legal framework on national, regional and local level

Serbia has established a comprehensive legal framework for environmental protection, aligned with international standards and EU regulations, as it is a candidate country for EU accession. The national legal framework is based on constitutional provisions, sectoral environmental laws and obligations related to the protection of natural resources, pollution prevention and public participation in environmental matters.

The Constitution of the Republic of Serbia guarantees the right to a healthy environment and imposes obligations on the state to protect natural resources. This constitutional basis is further developed through a number of key environmental laws relevant for tourism, hospitality, infrastructure, waste management, water protection and the protection of natural and cultural assets.

The key laws addressing this matter include:

- **Environmental Protection Law** – the foundational law governing environmental policies, including principles such as “polluter pays”, sustainable development and public participation. It also establishes the Environmental Protection Agency.
- **Law on Environmental Impact Assessment** – requires environmental impact assessment studies for projects with potential environmental harm, including infrastructure, industry and other relevant activities.
- **Law on Strategic Environmental Assessment** – applies to plans and programmes, including spatial plans and sectoral strategies.

- **Law on Air Protection** – sets air quality standards and emission limits, which is particularly relevant for urban and industrial areas such as Niš.
- **Law on Waste Management** – regulates waste disposal, recycling and extended producer responsibility.
- **Law on Waters** – protects water resources, including the Nišava River.
- **Law on Nature Protection** – protects biodiversity, national parks and protected areas, including natural values such as Sićevačka Gorge near Niš.
- **Law on Climate Change** – aligns Serbia with climate-related obligations and promotes greenhouse gas reduction strategies.

Serbia is also harmonising its laws with the EU acquis, particularly under Chapter 27 – Environment. In addition, Serbia has ratified several important international conventions, including the Aarhus Convention on public access to environmental information, the Espoo Convention on environmental impact assessment in a transboundary context, and the Bern Convention on biodiversity protection.

The Cadastre of Polluters in Serbia is an official register that records and monitors entities whose activities have a significant environmental impact. It is managed by the Environmental Protection Agency of the Republic of Serbia. Its purpose is to track industrial and other facilities that emit pollutants into the air, water and soil, ensure compliance with environmental regulations and provide transparency and public access to pollution data. The main types of pollutants recorded include greenhouse gases, air pollutants, water pollutants, waste generation and hazardous substances.

The Law on Environmental Impact Assessment regulates the process of assessing potential environmental effects of proposed projects before they are approved. Environmental impact assessment is carried out for projects in the fields of industry, mining, energy, transport, tourism, agriculture, forestry, water management, waste management and communal activities, as well as for projects planned within protected natural assets or in the protected surroundings of immovable cultural assets. Its purpose is to identify, predict and mitigate negative environmental impacts, ensure public participation and integrate environmental considerations into development planning.

The Law on Waste Management recognises municipal waste, commercial waste and industrial waste. For tourism and hospitality activities, this distinction is important because hotels, restaurants, cafés, accommodation providers and other tourism-related businesses mainly generate municipal and commercial waste, including food waste, packaging, paper, plastics, glass, metals and smaller quantities of specific or hazardous waste streams.

At the regional level, monitoring and regulation are the responsibility of the Nišava District Administration, which coordinates environmental policies with municipalities, including Niš, Aleksinac and other local governments. The City of Niš has adopted Local Environmental Action Plans addressing air pollution from traffic and industry, waste management including landfills and recycling, and water protection, particularly pollution control related to the Nišava River.

The key environmental issues in the Nišava District include air pollution, waste management, water pollution and protected areas. Niš has faced winter smog due to heating and traffic. Waste management remains a relevant challenge, including the need for modernisation of landfills such as “Crveni Krst”. Water pollution is also significant due to industrial and municipal discharges into the Nišava River, while protected areas such as Sićevačka Gorge represent important natural assets requiring protection.

In relation to air pollution, additional local sources relevant to tourism and hospitality include emissions from fuel combustion, emissions from food preparation on grills in catering establishments, toxic products resulting from the burning of oil used for food preparation, emissions from vehicle operation during cold and hot engine conditions, and unpleasant odours from waste disposal areas connected with catering activities. These issues are

directly relevant for restaurants, cafés, hotels, delivery activities and other hospitality operations.

The local survey context further confirms that Niš and Medijana face environmental challenges typical of a dense urban area, including air pollution, wastewater and drainage limitations, waste management issues and climate-related pressures. Medijana is a small but highly urban and densely populated municipality, which means that tourism and hospitality activities are closely connected with urban infrastructure, traffic, public utilities and local environmental quality.

Law enforcement is carried out through various inspectorates, including environmental, mining and construction inspectorates, which are responsible for monitoring compliance with national, regional and local regulations. Public participation is encouraged through NGOs and other local actors, although their influence may be limited by lack of equipment, funding and volunteers.

In general, Serbia has a solid legal framework for environmental protection, but implementation varies. In the Nišava District, key concerns include air and water pollution, waste management and the need for stronger enforcement and investment in green infrastructure. EU integration continues to push reforms, while local authorities and businesses require additional resources, technical support and practical tools for effective environmental governance.

## **Best Environmental Management Practices in Tourism**

The tourism sector is highly interlinked, both directly and indirectly, with many other industrial and service sectors. Its operation depends on complex supply chains, water supply, electricity, gas, steam, air-conditioning, sewage systems, waste management, transport, food and beverage production, textile supply, construction services and other supporting activities. Therefore, the improvement of environmental quality in tourism should be achieved through gradual improvements in all aspects and operations related to tourism.

For the purpose of this analysis, direct tourism actors may be broadly divided into several groups: food and drink services, accommodation services, tour operators and destination managers. Each of these actors has specific environmental aspects, but many environmental pressures are shared across the sector. Some best practices are cross-cutting and apply to all tourism actors, while others are more relevant to specific groups such as hotels, restaurants, travel agencies or destination management bodies.

Best Environmental Management Practice, or BEMP, is based on identifying practical and proven ways to improve environmental performance. Some organisations and companies in the tourism sector are more successful than others in managing their environmental impacts. By analysing these examples and identifying what they do better, other tourism actors can obtain reliable and practical guidance for improving their own environmental performance.

## Cross-cutting best practices

A first cross-cutting BEMP is to undertake an assessment of the most important direct and indirect environmental aspects associated with the enterprise. This includes the identification of activities, products and services that may affect the environment, either under direct control of the organisation or through its wider value chain.

Direct environmental aspects include, for example, energy consumption, water consumption, waste generation, wastewater generation, use of chemicals, emissions and daily operational practices. Indirect environmental aspects include supplier practices, transport, guest behaviour, purchased products, outsourced services and other activities that the organisation can influence but does not fully control.

Relevant performance indicators should be applied and compared with appropriate benchmarks of excellence. This allows organisations to understand their current performance, identify priority areas and define realistic improvement measures.

A second cross-cutting BEMP is to identify environmental hotspots in the supply chain. Tourism organisations depend heavily on external suppliers for food, beverages, equipment, furniture, textiles, cleaning products, energy, transport and other services. Environmental impacts may therefore occur not only at the tourism facility itself, but also during production, transport, delivery, use and disposal of goods and services. For this reason, tourism actors should consider the entire value chain and identify control points such as product selection, avoidance of unnecessary purchases, green procurement and supplier criteria.

## Destination managers

For destination managers, BEMP is to establish a unit or organisation responsible for the strategic sustainable development of the destination. This structure should coordinate relevant departments and support the implementation of specific actions within the framework of a destination plan.

Destination managers should monitor the state of biodiversity within the destination and implement a biodiversity conservation and management plan. This is especially important for destinations connected with natural heritage, protected areas, cultural landscapes, rivers, forests, mountains or other sensitive ecosystems. Measures may include development restrictions, compensation measures, preservation of green areas and activities aimed at protecting and improving biodiversity.

Another important BEMP for destination managers is to ensure that environment-related services within the destination are sufficient to cope with peak demand during the tourism season. These services include water supply, wastewater treatment, waste management, recycling and public transport or traffic management. If these systems are not adequate, increased tourism activity can lead to water stress, waste accumulation, traffic pressure, pollution and reduced quality of the destination.

Large events should also be covered by environmental management planning. Events can create strong temporary pressure through waste generation, transport, energy consumption and water use. Useful measures include promoting public transport to events, coordinating additional transport services, using environmentally certified products and services, avoiding disposable items where possible, avoiding excessive packaging, providing convenient recycling facilities and implementing energy and water efficiency plans.

## Tour operators

For tour operators, BEMP includes the careful design of tourism packages in order to avoid unnecessary environmental impacts. This may include avoiding unnecessary flights, improving energy efficiency of transport fleets, using more efficient vehicles, optimising transport operations and selecting accommodation and activity providers with better environmental performance.

Tour operators can also require or encourage environmental certification of accommodation providers. Where certification is not yet possible, they may require compliance with specific environmental criteria or ask accommodation providers to report on environmental performance. This information can later be used for benchmarking and improvement.

Another important practice is to work on specific environmental projects in destinations, ideally in cooperation with other tour operators and destination managers. These projects should focus on environmental hotspots connected with tourism, such as waste, water use, biodiversity, traffic, sensitive natural sites or visitor behaviour.

Tour operators should also provide customers with information on the environmental impacts of tourism packages. These messages should be targeted, positive and practical. They should help customers make more responsible choices during travel planning and help guests reduce their environmental impact during holidays.

In their own office and retail operations, tour operators should minimise the use of resources, especially paper and ink, choose environmentally certified materials and services where possible, and improve energy and water efficiency.

## Accommodation water consumption

Accommodation providers have a significant role in water management because hotels and similar facilities consume water in guest rooms, bathrooms, kitchens, laundries, swimming pools, spas, cleaning activities and landscaped areas.

BEMP is to undertake a water consumption audit and monitor water use across key water-consuming processes and areas. Sub-metering can help identify where the greatest consumption occurs and where efficiency improvements are possible. Regular maintenance of equipment is also important, including checks during housekeeping and technical inspections.

Accommodation facilities should install efficient water fittings, such as low-flow taps, low-flow showers, dual-flush toilets and waterless urinals where appropriate. Existing fittings can also be improved through retrofitted aerators.

Laundry is another important area. BEMP is to reduce laundry requirements through green procurement of bed linen and towels, taking into account size, density, colour and material. Guests should be encouraged to reuse towels and bed linen, while staff should be trained to apply cleaning methods that use water and chemicals efficiently.

Where technically and financially possible, accommodation facilities should consider greywater recovery or rainwater harvesting systems. Recovered greywater or collected rainwater can be used for non-potable purposes such as toilet flushing, irrigation, washing, cooling towers or general cleaning.

## Waste management

Waste management is one of the most visible environmental issues in tourism. Accommodation facilities, restaurants, cafés and other tourism businesses generate food waste, packaging waste, paper, glass, plastics, metals, used oils and other waste streams.

BEMP is first to prevent waste generation through green procurement and careful planning of purchases. This includes avoiding single-use items, buying cleaning agents in concentrated or bulk form, choosing products with less packaging, using returnable packaging where possible and avoiding over-ordering.

Businesses should provide separated waste collection throughout their facilities and ensure that there is a clear procedure for staff waste separation. Relevant recycling services should be contracted at least for glass, paper and cardboard, plastics, metals and organic waste.

Where wastewater is not sent to a centralised wastewater treatment plant, the installation of an on-site wastewater treatment system should be considered. Such systems should treat wastewater at least to secondary, and preferably to tertiary, level.

## Accommodation energy

Energy consumption in accommodation is connected with heating, cooling, ventilation, lighting, kitchens, laundries, hot water, swimming pools, spas, elevators and technical systems. BEMP is to undertake an energy audit and monitor energy consumption across key energy-consuming processes and areas.

New buildings should be designed to achieve the highest possible energy performance, while existing buildings should be retrofitted where possible to reduce heating and cooling demand. Measures may include better insulation, efficient windows, improved building envelope and more efficient technical systems.

HVAC systems should be optimised through zoned temperature control, controlled ventilation with heat recovery, efficient components and appropriate maintenance. Energy-efficient heat pumps, ground water cooling where possible, compact fluorescent or LED lighting, motion sensors, daylight-responsive lighting and other intelligent control systems can significantly reduce energy consumption.

Accommodation facilities should also consider on-site renewable energy generation where appropriate, such as solar, geothermal or wind energy, or procurement of electricity from reliable renewable sources.

## Kitchens and food and drink services

Food and drink services are important in tourism because they influence energy use, water use, food waste, packaging waste, supply-chain impacts and local economic development.

BEMP in food and drink management is based on cooperation between chefs, procurement staff and marketing staff. The objective is to develop a responsible menu offer that includes appropriate portion sizes, a high share of fruit, vegetables, cereals and pulses, reasonable portioning of meat and dairy products, seasonal products and local sourcing of fresh ingredients.

Green procurement decisions should be based on relevant environmental indicators. For fresh fruit and vegetables, transport distance can strongly influence environmental impact, especially when products are transported by air. Therefore, local and seasonal sourcing is an important environmental criterion. For many products, better environmental performance can be supported through third-party certification.

Kitchens should also address food waste, packaging waste, used vegetable oil and odours. Measures may include better stock control, careful menu planning, portion control, donation or appropriate handling of surplus food where possible, separation of organic waste and proper management of used cooking oil.

## Environmental pressures by tourism activity

Different tourism activities create different environmental pressures. Administration uses energy, water and raw materials, especially paper, and generates office waste such as paper and toner cartridges. Technical services consume energy and water, use hazardous products and can generate air emissions, wastewater and potentially hazardous waste.

Restaurants and bars consume energy, water and raw materials and generate municipal waste, especially food and packaging waste. Kitchens create additional pressures through food preparation, dishwashing, energy and water use, used vegetable oil and odours.

Room use and housekeeping involve energy and water consumption, use of guest products, use of cleaning chemicals, packaging waste and wastewater generation. Laundry requires significant quantities of water and energy and may involve hazardous products and wastewater.

Purchasing affects the supply chain through land use, degradation or destruction of ecosystems, disturbance of wildlife, energy and water consumption, air and water emissions, waste generation, packaging waste and possible hazardous substance leakages. Transport creates fuel consumption and air emissions. Building and construction activities can lead to land occupation, degradation of ecosystems, disturbance of wildlife, consumption of raw materials and generation of construction and hazardous waste.

## Importance of SMEs

Small and medium-sized enterprises represent a large part of the tourism sector. Most environmental practices are highly relevant for SMEs, but their implementation may be limited by lack of resources, lack of knowledge, limited management capacity and high perceived investment costs.

The main drivers of environmental responsibility among SMEs include better management of internal aspects, cost savings in the medium and long term, improved health and environmental conditions, stronger local branding and better response to existing or future legislation.

The main barriers include the diversity of SMEs, difficulty in disseminating information, limited management resources, high perceived and actual costs of investment, lack of awareness, lack of motivation, lack of knowledge and reluctance to seek external help.

For this reason, solutions for SMEs should be practical and result-oriented. Education of staff and managers is essential. Building clusters of SMEs to address common problems could reduce costs. Intermediary organisations, such as business associations, consultants and chambers of commerce, can support implementation. Advice and financial support from national, regional or local authorities may also be necessary.

Overall, Best Environmental Management Practices in tourism provide a practical framework for improving environmental performance. They connect daily business operations with broader environmental objectives and create a basis for future environmental certification. These practices are especially relevant for the next steps of this report, where local survey findings and the ISO 14001 framework are considered as tools for strengthening environmental quality management in the tourism sector.

## Survey Findings and Local Needs Assessment

The survey findings provide a practical overview of the current situation in the tourism, hospitality and cultural sectors in the territory of Niš, with a specific focus on the Municipality of Medijana. The survey covered organisations whose activities directly or indirectly influence environmental quality or are exposed to climate-related and environmental risks. These organisations represent important local actors in the green transition of tourism because they provide services to visitors, use resources in daily operations and contribute to the preservation of cultural and natural heritage.

### Profile of survey participants

The surveyed population included a wide range of tourism and hospitality actors. These included hotels and accommodation facilities, small family-run guesthouses, private accommodation and Airbnb rentals, restaurants, cafés and other hospitality establishments, travel agencies, tour operators and supporting organisations connected with the tourism sector.

The sample was strongly dominated by small-scale hospitality businesses. Almost three-quarters of the surveyed businesses, specifically **71%**, belonged to the **Restaurant/Café category**. This means that the overall findings largely reflect the perspective of food and beverage service providers, especially micro and small enterprises directly involved in preparation and service of food and drinks. Accommodation providers, including hotels and Airbnb-type rentals, represented a smaller but still important part of the sample, while travel agencies, museums and guiding services were less represented.

All surveyed businesses were privately owned, except for one publicly owned entity. The only public entity in the sample was the Museum of Church Artifacts, with three employees. This confirms that the survey primarily reflects the needs, limitations and operational reality of private-sector tourism and hospitality businesses in the Municipality of Medijana.

### Business characteristics

The surveyed entities were predominantly micro and small enterprises. The average number of employees was approximately **11.7**, while the median was lower, at **7 employees**. This shows that the sample included a few larger businesses, but that the majority were small operators with limited internal capacity.

As many as **85% of respondents had no more than 20 employees**, while only 15% had more than 20 employees. This is important because micro and small businesses usually have less time, staff and financial capacity to introduce formal environmental management systems, even when they are willing to improve their environmental performance.

The average operating duration of surveyed businesses was approximately **13.8 years**, while the median was around **9–10 years**. The sample included both relatively new enterprises and long-established businesses, with years of operation ranging from 2 to 64 years. This indicates that the local tourism and hospitality sector includes a mixture of newer market entrants and experienced operators.

The majority of surveyed businesses do not operate within protected natural or cultural sites. Around **85%** stated that they do not carry out their activities in such areas, while **15%** operate within the territory of a protected natural or cultural site. This may affect the level of formal environmental obligations, but it does not remove the need for environmental

management, especially because most businesses operate in a dense urban setting where waste, water, energy and air quality remain relevant issues.

## Tourism profile and guest structure

The main clientele of surveyed businesses was almost evenly divided between domestic tourists and a balanced mix of domestic and foreign guests. Around **50%** of respondents identified domestic tourists as their dominant clientele, while **47%** reported a balanced structure of domestic and foreign guests. Only one respondent, an Airbnb accommodation provider, identified foreign tourists as the dominant guest group.

This indicates that local tourism businesses in Medijana rely strongly on the domestic market, but that foreign visitors are also relevant for a significant part of the sector. The presence of both domestic and foreign guests means that environmental quality, service reliability, urban cleanliness, energy and water efficiency, and visible sustainable practices can influence both local competitiveness and the wider image of the destination.

The dominance of restaurants and cafés also shapes the environmental priorities of the sector. Issues such as food sourcing, food waste, packaging, water use, energy use, used cooking oil, waste separation and guest communication are especially important. Accommodation providers, although fewer in number, are important for water and energy management, heating and cooling systems, towel and linen reuse, and guest information on sustainable practices.

## Existing environmental practices

The survey shows that the overall level of implementation of sustainable practices in Medijana is moderate. Many businesses have already introduced basic and low-cost measures, especially those related to energy efficiency and local procurement. However, more advanced and systematic practices are less developed.

The strongest general result is related to energy-saving measures. **97% of surveyed businesses** reported that they already implement energy-saving measures, such as LED lighting, sensors, automatic switching off of lights and air conditioning, or similar basic efficiency measures. This shows that the first and easiest phase of the green transition has already been adopted by most businesses.

Water-saving practices are also present, but at a lower level. Around **67%** of respondents apply water-saving measures, such as low-flow taps, efficient devices or guest education on towel reuse. This indicates a solid basis for further improvement, particularly in accommodation, restaurants and cafés where water is used daily for cleaning, food preparation, sanitary needs and guest services.

Around **55%** of surveyed businesses offer environmentally friendly alternatives to guests, such as refillable bottles, biodegradable materials or reusable products. This is positive, but it also shows that almost half of the sector still does not offer such alternatives in a visible or structured way.

Employee environmental awareness training remains weaker. Only **47.5%** of hospitality and tourism businesses currently provide some form of staff training on environmental awareness and sustainability. This is a significant gap because many environmental measures depend on daily behaviour of employees, including switching off equipment, sorting waste, preventing water waste, managing food waste and communicating with guests.

## Practices in food, accommodation and travel activities

Local food sourcing is the strongest sustainable practice in the hospitality sector. **87% of hospitality businesses** reported that they procure at least part of their ingredients from local producers. This supports the local economy and reduces transport-related environmental impacts. It also provides a strong foundation for further development of sustainable food and beverage services in Medijana.

However, food waste management is much weaker. Only around **32%** of businesses actively manage food waste through donation or composting. This means that a large quantity of edible or organic waste may still end up in landfills. Given the dominance of restaurants and cafés in the sample, food waste management is one of the most important areas for immediate improvement.

In relation to menus, slightly more than half of establishments, around **52%**, offer plant-based or explicitly environmentally friendly menu options. The remaining share does not yet include these options in a structured way. This shows that there is room to improve sustainable menu planning, portion control, seasonal offers and communication with guests.

In the accommodation segment, all surveyed providers reported using energy-efficient heating and cooling systems. Two-thirds of accommodation providers inform guests about sustainable practices, and the same share applies towel and bed linen reuse measures. These results are positive, but the small number of accommodation providers means that improvements should still be supported through general guidance and simple practical tools rather than complex certification requirements at the first stage.

Organised tourist transport shows a moderate level of sustainability. Two of the three operators rely on low-emission or electric vehicles, while one continues to use conventional options. Guest education about the environmental impact of travel choices follows a similar pattern, with two operators actively providing such information and one not yet incorporating it into its service approach.

## Local needs assessment

The survey findings show that local businesses have already adopted a number of basic environmental practices, especially where these practices are simple, low-cost and directly connected with lower utility costs. Energy efficiency, local food sourcing and some water-saving measures are already present across a significant part of the sector.

At the same time, the findings show that further progress requires more structure and support. Many businesses operate without formal environmental procedures, without designated responsible persons, without regular monitoring routines and without systematic staff training. Environmental actions are therefore often practical and ad hoc, rather than part of a structured environmental management system.

The most immediate needs of local tourism and hospitality businesses include simple operational guidance, practical training, financial support, technical assistance and templates that can be easily used by micro and small enterprises. Businesses need clear instructions on how to monitor energy, water and waste, how to reduce food waste, how to introduce basic internal environmental responsibilities and how to communicate sustainable practices to guests.

The survey also shows that support should be adapted to the structure of the local sector. Since restaurants and cafés dominate the sample, guidance should focus strongly on food waste, packaging, water use, energy use, used cooking oil, local sourcing and guest communication. For accommodation providers, the focus should be on heating and

cooling, water efficiency, towel and linen reuse, waste separation and guest information. For travel agencies and tour operators, the focus should be on low-impact transport options, responsible tour design and visitor education.

Overall, the survey confirms that Medijana's tourism and hospitality sector has completed the easiest and cheapest phase of environmental improvement, but has not yet moved into systematic environmental quality management. The next steps should therefore focus on practical tools, training, public-sector support and gradual preparation for environmental certification.

## Awareness and Barriers to Environmental Quality Certification

The survey results show that environmental quality certification is still at an early stage among tourism and hospitality businesses in the Municipality of Medijana. Although many businesses already apply basic environmental practices, such as energy-saving measures, water-saving devices or local food sourcing, the level of awareness and active engagement with formal certification schemes remains low.

### Awareness of environmental certification schemes

Awareness of environmental certification programmes is generally limited. Only **30%** of respondents stated that they were familiar with any environmental certification scheme, while **70%** had never encountered such schemes. This shows that environmental certification is not yet widely understood or recognised as a practical business tool among local tourism and hospitality actors.

Among those respondents who were familiar with certification schemes, **ISO 14001** was the most recognised, with **64.3%** of informed respondents mentioning it. This indicates that ISO 14001 has stronger visibility than other schemes, probably because it is a broad international management standard applicable to many types of organisations.

The **Green Key** certification scheme was recognised by **28.6%** of those familiar with certification. This is important because Green Key is more directly connected with tourism and hospitality, but its recognition in the local market is still moderate. **EMAS** was recognised by only **7.1%**, which confirms that this scheme remains largely unknown among the surveyed businesses.

These findings show that general corporate standards such as ISO 14001 are better known than tourism-specific environmental labels. However, even ISO 14001 is known only among a smaller group of respondents, meaning that awareness-raising remains a necessary first step before certification can be realistically promoted.

### Steps already taken toward certification

Interest in actively pursuing certification is extremely low. Only **7.5%** of surveyed businesses reported that they had taken any steps toward obtaining an environmental certificate, while **92.5%** had taken no steps at all. This clearly shows that environmental certification is not yet treated as an operational priority by most businesses in the local tourism and hospitality sector.

This does not necessarily mean that businesses are completely uninterested in environmental improvement. The previous survey findings show that many of them already

apply practical measures, especially those that reduce energy and water costs. However, there is a significant gap between basic environmental practices and formal certification. Businesses may be willing to save energy or reduce water use, but they are not yet moving toward structured environmental management systems or recognised certification schemes.

The low level of certification activity also suggests that businesses may perceive certification as too complex, expensive or distant from their current capacities. This is particularly relevant because most surveyed entities are micro and small enterprises with limited staff, limited financial resources and limited internal management structures.

## Internal environmental management structures

The lack of formal internal structures is one of the most important findings of the survey. Only **5%** of businesses reported having a designated person responsible for environmental quality management, and only **5%** include environmental topics in their strategic planning. This means that **95%** of surveyed businesses operate without a clearly assigned person, internal accountability or systematic integration of environmental issues into business planning.

This finding is very important because environmental certification requires more than individual measures. It requires a minimum level of organisation: someone must be responsible for monitoring, documentation, communication, legal compliance, objectives and improvement actions. Without this basic structure, environmental management remains informal and dependent on individual motivation.

In practical terms, many businesses may switch off lights, use LED lighting or buy local food, but they do not yet have an environmental policy, written procedures, performance monitoring or a defined improvement plan. This confirms that environmental quality management is currently treated mostly as an ad hoc activity, not as an integrated part of business operations.

## Main barriers to certification and environmental management

The main barriers identified in the survey are financial, knowledge-based and institutional. Financial limitations remain the most significant constraint, with more than **52%** of businesses stating that insufficient funds prevent them from investing in sustainability measures. This barrier is especially relevant for micro and small enterprises, where even relatively modest investments in equipment, monitoring systems, waste solutions or certification preparation can be perceived as expensive.

Lack of knowledge and staff training is almost equally important. **47.5%** of respondents identified lack of knowledge or training as a barrier. This shows that many businesses do not know where to start, which measures are most relevant, how certification works, what documents are required or how environmental practices can be adapted to their specific type of activity.

Lack of technical support from public institutions was also identified as a significant barrier, mentioned by **35%** of respondents. This indicates that businesses expect more practical assistance from local or national authorities, especially in the form of guidance, templates, advisory support, training and access to financial support.

Customer awareness and willingness to pay also represent a challenge. Some businesses believe that customers are not sufficiently interested in environmentally responsible services or are not willing to pay more for them. This creates a weak market incentive for

certification. If businesses do not see clear customer demand, they may hesitate to invest in environmental certification, even when they understand its long-term value.

Another barrier is the belief that suitable environmental practices may not exist for certain business types. This view is present mainly among smaller cafés and restaurants, which may see environmental management as more relevant for hotels or larger organisations. This shows the need for practical, sector-specific guidance that demonstrates simple and low-cost measures suitable for food and beverage businesses.

## **Differences by business type and enterprise size**

The intensity and type of barriers differ by business category. For restaurants and cafés, the most important barriers are financial limitations and lack of knowledge or training. This is expected because food-service businesses dominate the sample and often operate with limited margins, daily operational pressure and small teams. For them, environmental certification may appear too formal unless it is translated into practical actions such as food waste reduction, packaging reduction, energy savings, water efficiency and proper management of used cooking oil.

Accommodation providers show an even stronger financial barrier. The survey indicates that financial limitations are particularly acute in this segment, which is logical because hotels and accommodation facilities may need investments in heating and cooling systems, water-saving equipment, laundry management, guest communication materials, monitoring systems and waste separation infrastructure.

Travel agencies and guides appear to face a different type of challenge. Financial barriers are less dominant for them, while the main concerns relate to the perceived lack of practices adapted to their business model and the limited willingness of clients to pay extra for sustainable offers. Their environmental management is less focused on physical resources at the premises and more connected with transport, choice of partners, tour design and visitor education.

Enterprise size also influences the barriers. Financial limitations are particularly strong among small businesses with 5–14 employees, while lack of knowledge and training is also very common in this group. Medium-sized businesses more often identify the lack of technical support from public institutions as a barrier, probably because they have greater operational complexity and more potential to implement formal systems, but still require external guidance.

## **Key conclusion on certification readiness**

The survey findings show that the local tourism and hospitality sector is not yet ready for direct large-scale certification without prior support. The main reason is not only lack of money, but also lack of information, lack of training, weak internal management structures and insufficient technical support.

At the same time, the sector already has a practical starting point. Many businesses have adopted basic energy-saving and water-saving measures, and local food sourcing is widely present. This means that certification readiness should be developed gradually. The first step should not be immediate certification, but preparation: awareness-raising, simple environmental policies, appointment of responsible persons, basic monitoring of energy, water and waste, staff training and practical checklists for different business types.

Once these basic elements are in place, businesses can move more realistically toward certification schemes such as ISO 14001, Green Key or other environmental quality labels. In

this sense, the main need is to create a step-by-step pathway from existing basic practices toward structured environmental quality management and, eventually, formal certification.

## Expected Benefits and Preferred Support Measures

The survey findings show that local tourism and hospitality businesses primarily understand environmental quality management through its practical and economic benefits. Although environmental protection and climate resilience are recognised as important, the strongest motivation for businesses is connected with cost reduction, access to funding and improved competitiveness.

### Expected benefits from environmental quality management

The most anticipated benefit from implementing environmental practices is **operational cost reduction**, identified by **30.9%** of respondents. This confirms that businesses see environmental quality management as a way to reduce energy, water, material and waste-related costs. Measures such as energy-efficient lighting, efficient heating and cooling systems, water-saving devices, improved procurement and waste prevention can produce direct financial savings.

This result is consistent with the current level of environmental practices already adopted by businesses. Since most surveyed businesses already apply basic energy-saving measures, it is clear that environmental improvement is more easily accepted when it has a visible financial return. For micro and small enterprises, this practical benefit is especially important because any new measure must be realistic, affordable and connected with daily operations.

The second important expected benefit is **access to funding**, identified by **22.1%** of respondents. This shows that businesses understand that banks, public institutions, international donors and support programmes increasingly favour green investments and environmentally responsible business models. Since financial constraints are one of the main barriers to environmental improvement, access to funding is seen not only as a benefit but also as a condition for further progress.

**Market competitiveness** is also recognised as a relevant benefit, identified by **19.1%** of respondents. This means that businesses see environmental quality management as a possible way to improve reputation, differentiate themselves from competitors and attract guests who value responsible tourism. However, market competitiveness is still less important than immediate cost reduction, which confirms that the local sector currently has a more practical than promotional approach to environmental management.

**Climate change resilience** is recognised as a benefit, but as a lower priority compared with direct economic advantages. It was identified by **11.8%** of respondents. This suggests that businesses are aware that environmental practices can help them become more resistant to climate-related pressures, such as heatwaves, water stress, extreme weather events and rising energy costs, but they still tend to prioritise short-term financial and operational benefits.

### Operational cost reduction as the main driver

Operational cost reduction is the strongest driver because it is directly connected with the daily reality of micro and small businesses. Many local tourism and hospitality operators work with limited margins and limited investment capacity. For them, environmental

quality management becomes attractive when it reduces electricity bills, water bills, waste disposal costs or unnecessary use of materials.

This is particularly relevant for restaurants, cafés and accommodation providers. Restaurants and cafés can reduce costs through better energy use in kitchens, improved refrigeration, reduced food waste, better stock control, reduced packaging and efficient water use. Accommodation providers can reduce costs through efficient heating and cooling, towel and linen reuse, water-saving equipment, lighting control and energy monitoring.

The survey therefore shows that the most effective way to promote environmental quality management is to present it not only as an environmental obligation, but also as a practical tool for improving business efficiency.

## **Access to funding and market competitiveness**

Access to funding is a major expected benefit because businesses understand that environmental improvements often require initial investment. Even relatively simple measures, such as water-saving equipment, waste separation infrastructure, monitoring devices, efficient appliances or staff training, may represent a financial burden for small enterprises.

Environmental certification and structured environmental management can improve the ability of businesses to apply for grants, subsidies, favourable loans or donor-funded support. This is especially relevant in the context of green transition policies and sustainable tourism initiatives, where environmental performance is increasingly used as a criterion for support.

Market competitiveness is also important, although it is not yet the dominant motivation. Businesses recognise that environmental quality management can improve public image and help them position themselves as responsible service providers. For hotels, restaurants and tour operators, visible environmental practices can support branding, guest trust and long-term competitiveness.

However, the survey also indicates that customer demand for green services is still not strong enough to be the main driver. This means that competitiveness benefits should be supported by awareness campaigns, local promotion of green businesses and clearer communication of environmental practices to visitors.

## **Climate change resilience**

Climate change resilience is a secondary but important expected benefit. Tourism and hospitality businesses are already exposed to rising temperatures, heatwaves, extreme weather events, increased cooling needs, infrastructure problems and changes in seasonal tourism patterns.

Environmental quality management can help businesses respond to these pressures. Energy efficiency reduces vulnerability to high electricity costs. Water-saving measures reduce pressure during dry periods. Waste prevention and better resource management improve operational stability. Local sourcing can reduce dependence on longer supply chains. Better planning and monitoring can help businesses react more quickly to environmental disruptions.

Although climate resilience is not yet the strongest motivation for businesses, it should be included in future support programmes because climate-related risks are expected to become more visible and more costly over time.

## Preferred forms of support

The survey clearly shows that businesses need external support in order to move from basic environmental practices toward structured environmental quality management and certification readiness.

The most requested form of support is **financial assistance or subsidies**, selected by **80%** of respondents. This is the clearest signal from the survey. Many businesses believe that without direct financial support, investments in energy efficiency, water-saving systems, waste management solutions or other green improvements will remain difficult or unrealistic.

The second most requested form of support is **training and workshops**, selected by **55%** of respondents. This confirms that businesses do not only need money, but also practical knowledge. Training should focus on simple and applicable measures, such as energy monitoring, water efficiency, food waste reduction, waste separation, green procurement, staff awareness, guest communication and preparation for certification.

**Support from local government institutions** was selected by **37.5%** of respondents. This shows that institutional backing is important, but also suggests that businesses may not currently perceive local public support as sufficiently accessible or practical. Local authorities could have a stronger role in coordinating training, providing information, linking businesses with support programmes and promoting local green tourism initiatives.

**Networking with certified or more advanced businesses** was selected by **22.5%** of respondents. This form of support is less requested than subsidies or training, but it can still be useful. Peer learning can help businesses understand what certification looks like in practice, how other companies solved similar problems and which measures are realistic for micro and small enterprises.

**Consultancy services** were selected by **17.5%** of respondents. This lower percentage may indicate that businesses are not fully aware of the practical value of expert guidance, or that consultancy is perceived as too expensive or too abstract. For this reason, consultancy support may be more effective if it is provided through subsidised advisory programmes, standardised templates or group-based assistance rather than only individual paid services.

## Public-private cooperation

The survey also shows a weak level of public-private cooperation in the field of environmental management and sustainable tourism. Only one respondent considered that a well-established public-private partnership exists in this area. This indicates that local businesses generally do not perceive current cooperation mechanisms as effective or visible.

At the same time, a large share of respondents expressed the need to strengthen existing cooperation or create new partnerships. Almost **70%** of businesses called either for substantial strengthening of existing forms of cooperation or for the urgent creation of new partnerships. This points to a clear institutional gap and a need for better coordination between businesses, local authorities, tourism organisations, environmental experts and other relevant stakeholders.

Public-private cooperation is especially important because many environmental challenges cannot be solved by individual businesses alone. Waste management, drainage, wastewater infrastructure, traffic, public transport, green areas, awareness campaigns and local certification support require coordinated action. Businesses can improve their own operations, but they also need an enabling local framework.

## Summary of support needs

The preferred support measures show that local tourism and hospitality businesses need a combination of financial, educational and institutional support. Subsidies and financial incentives are the first priority, but they should be combined with practical training, simple guidance, technical assistance and stronger cooperation with public institutions.

The findings also indicate that support should be adapted to the size and type of business. Restaurants and cafés need practical solutions for energy use, water use, food waste, packaging and used cooking oil. Accommodation providers need support for heating and cooling systems, water efficiency, laundry practices and guest communication. Travel agencies and guides need support for sustainable tour design, low-impact transport and visitor education.

Overall, businesses see environmental quality management as useful, but they need a realistic pathway. The next stage should therefore include financial instruments, training programmes, practical tools, public-sector coordination and gradual preparation for environmental certification.

## ISO 14001 as a Framework for Environmental Management

ISO 14001 is an international standard for environmental management systems. It was first published in 1996 with the purpose of helping organisations manage environmental protection in a systematic way. The standard applies to environmental aspects over which an organisation has control, as well as to those aspects over which the organisation can reasonably be expected to have influence.

The importance of ISO 14001 has increased because organisations are under growing pressure to demonstrate responsibility toward the environment, reduce negative impacts, use resources more efficiently and comply with legal and market requirements. Environmental protection is no longer treated only as a regulatory obligation, but also as a factor of competitiveness, reputation and long-term business stability.

ISO 14001 certification can help organisations show a positive orientation toward the environment while also reducing costs related to resources and energy. The standard supports organisations in identifying environmental aspects, setting objectives, improving operational control, monitoring performance and introducing continual improvement. It can also respond to the requirements of interested parties that increasingly expect companies to demonstrate environmental responsibility.

The standard is applicable to all types of organisations, regardless of their size, type or nature of activity. This is important for the tourism and hospitality sector because it includes very different actors, from hotels and restaurants to travel agencies, public institutions, destination managers and supporting services. Even small businesses can apply the principles of ISO 14001 if the system is adjusted to their actual scale, risks and operational capacity.

The implementation of an environmental management system should produce several key results:

- improvement of environmental performance;
- fulfilment of compliance obligations;
- achievement of environmental objectives.

These results are particularly relevant for tourism businesses because many environmental impacts are directly linked with daily operations. Energy consumption, water use, wastewater, food waste, packaging, cleaning chemicals, transport and procurement can all be managed more effectively through a structured environmental management system.

## ISO 14000 series and environmental management

ISO 14001 is part of the wider ISO 14000 series of standards. The ISO 14000 series provides a common international framework for organisations dealing with environmental management. It was developed to help different types of organisations implement and manage environmental protection systems and to support a more consistent global approach to environmental issues.

The ISO 14000 series is comparable in structure and management logic to ISO 9000 standards for quality management. While ISO 9000 focuses on quality assurance and customer requirements, ISO 14000 focuses on environmental protection, environmental aspects, compliance obligations, resource use, pollution prevention and continual improvement. This similarity makes it easier for organisations that already have experience with quality management systems to integrate environmental management into their existing organisational structure.

The standards of the ISO 14000 series do not deal with ecology as a biological science, but with environmental protection and the management of human impacts on the environment. Their purpose is to provide organisations with practical elements of an effective environmental management system that can also be integrated with other management systems.

## Main benefits of ISO 14001

The application of ISO 14001 can provide a number of benefits for organisations. These benefits include more efficient environmental protection, rational management of resources, development of an environmental culture within the organisation, improved reputation, better internal and external communication, more efficient business operations and better alignment with international, national and local environmental legislation.

For tourism and hospitality businesses, these benefits are practical and directly connected with daily work. More efficient use of energy and water can reduce operating costs. Better waste management can reduce disposal costs and improve the cleanliness and image of the facility. Improved communication can help employees and guests understand environmental measures. Legal compliance reduces risk, while certification can strengthen trust among clients, partners, public authorities and funding institutions.

ISO 14001 also helps organisations move from occasional environmental measures to a planned and documented management approach. Without such a system, environmental practices may remain informal and dependent on individual motivation. With ISO 14001, responsibilities, procedures, objectives, monitoring and corrective actions become part of the organisation's regular management process.

## Principles and requirements of the standard

The main goal of ISO 14001 is to help protect the environment and prevent pollution, while taking into account social and economic needs. The standard does not prescribe a fixed level of environmental performance that every organisation must achieve. Instead, it defines requirements for establishing and maintaining a management system through which the

organisation can control its environmental aspects, comply with applicable obligations and continually improve.

The standard requires organisations to define and apply an environmental policy, plan environmental objectives, implement operational controls, monitor performance, evaluate compliance and review the effectiveness of the system. The structure of ISO 14001 includes the following elements:

- Scope of application
- References to other standards
- Terms and definitions
- Requirements of the environmental management system
- General requirements
- Environmental policy
- Planning
- Implementation and operation
- Checking
- Management review

The success of implementation depends on the commitment of all levels and functions within the organisation, especially top management. Environmental management cannot be effective if it is treated only as a technical or administrative task. Management must provide direction, assign responsibilities, ensure resources and support continual improvement.

## **Environmental policy, planning and implementation**

The environmental policy is the foundation of the environmental management system. It should express the organisation's commitment to environmental protection, compliance with applicable requirements and continual improvement. In tourism businesses, the policy should be understandable, realistic and connected with actual environmental aspects, such as energy use, water consumption, waste generation, procurement and guest services.

Planning includes identifying environmental aspects, determining legal and other requirements, assessing risks and opportunities, and setting environmental objectives. For a hotel, this may include reducing electricity consumption, improving water efficiency, reducing food waste, improving waste separation or introducing more environmentally responsible procurement. For a restaurant, planning may focus on energy use in the kitchen, local sourcing, packaging reduction, used oil management and food waste prevention.

Implementation and operation include defining responsibilities, training employees, establishing communication, controlling documents and managing operations that may have environmental impacts. This is particularly important in tourism and hospitality because many environmental impacts depend on daily employee behaviour. Staff must understand what needs to be done, why it matters and how measures should be applied in practice.

## **Checking, corrective action and management review**

Checking is necessary to confirm whether the environmental management system is functioning as intended. This includes monitoring key indicators, evaluating compliance, recording results, identifying nonconformities and implementing corrective actions. In practical terms, tourism businesses may monitor electricity consumption, water

consumption, waste quantities, number of staff trained, use of local products or implementation of guest communication measures.

Corrective action is important when objectives are not met or when problems occur. For example, if waste separation is not properly applied, the organisation should identify the cause, retrain staff, improve signage or adjust collection procedures. If water consumption increases unexpectedly, leaks, equipment problems or operational practices should be investigated.

Management review is the final step in the cycle. Top management reviews the environmental management system to determine whether it remains suitable, adequate and effective. This review supports continual improvement and ensures that environmental management remains part of business decision-making rather than a one-time activity.

## **Relevance of ISO 14001 for tourism businesses**

ISO 14001 is relevant for tourism because the sector has a wide range of environmental aspects and pressures. Hotels, restaurants, accommodation providers, travel agencies and destination-related services use resources, generate waste and interact with guests, suppliers and local infrastructure. A structured environmental management system helps these organisations identify what they can control, what they can influence and which measures should be prioritised.

For micro and small enterprises, ISO 14001 may appear complex if presented only as a formal certification requirement. However, its basic logic is practical: identify environmental aspects, define responsibilities, set objectives, implement measures, monitor results and improve over time. This logic can be applied gradually, even before formal certification.

In the context of the survey findings, ISO 14001 is especially useful because the local tourism and hospitality sector already applies basic environmental practices, but lacks formal structure. The standard can provide that structure by introducing environmental policy, responsible persons, documentation, monitoring and continual improvement. Therefore, ISO 14001 can serve as a framework for moving from individual measures toward systematic environmental quality management.

## **Application of ISO 14001 in Hotels and Tourism Businesses**

Hospitality is an activity that provides guests with accommodation, food and beverage services, recreation and various other services. During a temporary stay in hotel facilities, tourism enables visitors to rest and relax, business travellers to hold meetings and establish contacts, participants of congresses and seminars to work in appropriate conditions, and local residents to use food, beverage and entertainment services.

Hotels are complex business systems. A hotel company is a legal entity that performs hospitality and hotel activities on the market in order to generate profit and achieve its business objectives. Its operations combine services and goods, with specific technical, technological, organisational and environmental requirements. For this reason, environmental management in hotels cannot be reduced to one isolated measure, but must be integrated into the overall management and daily operation of the facility.

In the hotel and hospitality sector, organisations are increasingly expected to manage the environmental impacts of their activities, products and services. ISO 14001 provides a useful framework for this because it helps organisations identify, monitor and control their environmental aspects, reduce negative impacts and improve compliance with environmental legislation. The ISO source document emphasises that organisations applying ISO 14001 can reduce harmful environmental impacts and ensure that their impacts are identified, controlled and aligned with legal requirements.

## **Environmental management in hospitality**

Hotels are recognised as significant consumers of energy and water and as potential sources of air pollution, wastewater and solid waste. In many countries, a considerable number of hotels and restaurants are technically outdated or equipped according to older standards. This can negatively affect both environmental performance and the basic business objectives of hospitality facilities: guest satisfaction and profitability.

Excessive negative environmental impact occurs when the number of visitors exceeds the capacity of the environment to receive and tolerate such pressure. Uncontrolled conventional tourism can create risks such as loss of natural land, soil erosion, increased pressure on endangered species, increased risk of forest fires, discharge of waste substances and wastewater, and increased pollution.

In hospitality facilities, the most common environmental impacts and pollutants are:

- wastewater and wastewater generation;
- solid waste generation;
- air pollution;
- energy consumption.

During the last decades, attention has increasingly shifted not only to environmental pollution outside the facility, but also to environmental conditions inside the facility itself. This includes the quality of air, water, working conditions, use of chemicals, waste handling and the general environmental awareness of employees and guests.

Environmental protection defines limits for different types of pollution, proposes legal regulation, introduces preventive and corrective measures in case of non-compliance or environmental incidents, and supports the maintenance of adequate air, water and soil quality. In this sense, environmental protection covers measures related to noise reduction, drinking water control, reduction of harmful emissions, waste management, use of energy-saving technologies, renewable energy and sustainable development.

## **Management responsibility and environmental accounting**

Hotel management needs an information system that enables insight into the costs and effects of environmental actions. Environmental measures should not be treated only as an additional expense, but as activities whose costs and benefits can be monitored and compared. This is important for optimising the relationship between environmental protection and economic performance.

Accounting and management functions should cooperate closely with the person responsible for environmental matters. The task of this responsible person is to coordinate activities related to environmental protection, support the achievement of environmental objectives, and include employees, guests and partners in the environmental programme of the hotel.

The source document emphasises that accounting should also have a preventive role by expressing the value of results achieved through environmental measures, including those proposed by employees. Such information can be useful both internally, for management decisions, and externally, for demonstrating environmental responsibility.

By showing the financial effects of environmental investments and measures, the organisation provides support to the person responsible for environmental coordination. This person becomes a promoter of successful and cost-effective environmental activities.

## **Education and involvement of employees**

Employee education is one of the key conditions for successful environmental management in hotels and tourism businesses. The person responsible for environmental matters should promote, encourage and organise training and awareness-raising activities. Employees should understand how their daily actions influence water consumption, energy consumption, waste generation, use of chemicals and overall environmental performance.

Education and motivation of employees mean aligning environmental activities with the common goals of the employer and employees. Employees should be encouraged to contribute their own ideas to plans for sustainable development. This strengthens their responsibility for environmental protection and makes environmental management more practical.

New knowledge must be applied in practice. All employees should be actively involved in saving water and energy, separating waste and applying other environmental measures. The source document also emphasises that employees should constantly be aware of how their actions can affect savings within the existing cost structure.

Environmental management should be organised as teamwork and should include different hierarchical levels and areas of responsibility. If environmental activities remain limited to one person or one department, they are less likely to become part of daily hotel operations.

## **Involvement of hotel guests**

Environmentally aware employees can also influence hotel guests. Guests should not only be informed about environmental measures, but also included in environmental actions, especially those that aim to reduce costs and create a better working and living environment.

Information for guests should be presented in an appropriate and understandable way. It should show what the hotel is doing to protect the environment and how guests can participate. Examples may include towel and linen reuse, water saving, responsible use of heating and air conditioning, waste separation, use of refillable products and responsible behaviour in the destination.

In this way, environmentally aware guests, as well as those who are still developing such awareness, can form a clearer picture of the environmental culture of the hotel and, indirectly, of the destination itself.

The basic principle of all environmental protection actions and measures should be applicability. No environmental initiative will be successful if it is not realistically designed, accepted by the team and implemented in practice.

## Importance of ISO 14001 for hotels

The ISO 14000 series is a group of standards developed for the establishment of environmental management systems, in a way comparable to ISO 9000 standards for quality management. Within the ISO 14000 series, ISO 14001 is the main standard that specifies requirements for an effective environmental management system.

In hotels, ISO 14001 is important because hotel operations include many environmental aspects: accommodation, food preparation, laundry, heating and cooling, water use, waste generation, procurement, maintenance, guest services and transport-related activities. A formal environmental management system helps identify and control these aspects.

There is a strong connection between environmental management and competitiveness. The source document states that equal participation in the international market is not possible if products and services are not aligned with international standards. Business organisations that adopt ISO 14001 can reduce harmful environmental impacts and ensure that these impacts are identified, monitored and aligned with legal requirements. Negative impacts can then be gradually reduced or eliminated through control mechanisms.

For hotels, this means that environmental management becomes part of service quality and business positioning. A hotel that controls energy consumption, water use, waste, wastewater, emissions and procurement can improve both its environmental performance and its market reputation.

## Green hotels and implementation practice

The available literature shows that the first hotels to introduce environmental operational standards were mostly hotels belonging to large hotel chains. One reason is that many environmental measures require significant initial investment. Although the return on such investment can be relatively quick, hotels without stable financial and management support often find it difficult to introduce formal environmental systems.

In many countries, environmental policy has traditionally focused more on sanctioning those who do not comply with standards and regulations, rather than rewarding voluntary environmental initiatives. However, the source document notes that government initiatives have increasingly appeared with the aim of subsidising hotels in their efforts to introduce environmental standards into their operations.

This is important for smaller hotels, restaurants and tourism businesses because they often need external support in order to adopt environmental standards. Financial incentives, technical assistance, training and practical guidance can make the difference between informal environmental actions and a structured environmental management system.

Green hotels are therefore not only hotels with isolated eco-friendly measures. They are hotels that manage environmental protection systematically, connect environmental measures with cost control, involve employees and guests, and use standards such as ISO 14001 as a basis for continual improvement.

## Planning, construction and operation of tourism facilities

The implementation of best environmental practices and ISO 14001 in tourism should be based on proper urban planning, project design, construction management and operation of facilities intended for tourism activities.

Urban planning for areas intended for tourism development should include analysis of possible environmental impacts of the project. Construction rules and location information

should also consider all aspects of sustainable management of basic environmental elements.

When choosing a location for construction, it is necessary to ensure minimal impact in terms of degradation of environmental elements. The project design should ensure that the building is harmonised with its surroundings as an ambient whole. Construction works should be carried out in accordance with environmental requirements, including the use of environmentally acceptable materials where possible, such as earth, stone and wood.

This approach is relevant not only for hotels, but also for restaurants, bars, cafés, catering facilities, fast food facilities, mobile facilities and other hospitality establishments. Such facilities should identify spaces and rooms that may influence environmental degradation and apply appropriate control measures.

## **Practical environmental measures in hospitality facilities**

In facilities that provide food and beverage services, special attention should be given to areas that can affect environmental quality. These include kitchens, storage areas, waste storage areas, areas for washing dishes, sanitary facilities, ventilation systems, parking areas and delivery zones.

Parking areas should be designed and maintained in a way that reduces environmental pressure. The source document suggests that parking surfaces should be paved with materials that are easy to maintain and should avoid the creation of heat islands where possible. Atmospheric water should be channelled and directed to dedicated reservoirs for treatment. Collected water may later be used for washing or cooling parking areas or for irrigation of landscaped areas through drip systems. The use of electromobility in communication with suppliers and distributors should also be considered.

Renewable energy sources are also important for hospitality facilities. They may be used for heating and cooling, washing kitchen dishes and equipment, and supporting other technical processes. Energy efficiency should be considered during both the design and operation of the facility.

Water management should include rational use of drinking water, use of water-saving devices, prevention of leaks and possible reuse of collected rainwater or treated water where technically possible. Restaurants and hotels should also pay attention to wastewater generation, especially wastewater from kitchens, dishwashing, laundry and sanitary facilities.

Waste management should include prevention, separation and proper handling of different waste streams. Food waste, packaging waste, used cooking oil, glass, plastic, paper, cardboard and metal should be managed in a controlled way. Used oil from food preparation must be handled carefully because improper burning or disposal can create toxic products, odours and additional environmental impacts.

Air emissions and odours are particularly relevant for restaurants and catering establishments. Food preparation, grills, kitchen ventilation, burning of oil and waste storage areas can all create emissions or unpleasant odours. These aspects should be identified and controlled through proper equipment, maintenance, ventilation and waste handling.

## **ISO 14001 as an operational tool for hotels and tourism businesses**

For hotels and tourism businesses, ISO 14001 can serve as an operational tool that connects planning, implementation, monitoring and improvement. It supports the organisation in

defining environmental objectives, assigning responsibilities, training employees, controlling operations and reviewing results.

In practice, ISO 14001 can be applied to:

- reduce energy and water consumption;
- improve waste management and recycling;
- control wastewater and emissions;
- manage chemicals and hazardous materials;
- improve procurement practices;
- involve employees in environmental actions;
- inform and engage guests;
- improve compliance with environmental legislation;
- support cost savings and competitiveness.

The implementation of ISO 14001 should be realistic and adapted to the size and complexity of the organisation. For large hotels, this may include detailed procedures, monitoring systems and internal audits. For smaller hotels, restaurants and tourism businesses, it may begin with simpler steps: defining an environmental policy, appointing a responsible person, monitoring energy and water use, improving waste separation, training employees and setting measurable objectives.

The key value of ISO 14001 in the tourism and hospitality sector is that it transforms environmental protection from occasional activities into a structured management process. In this way, environmental measures become part of daily operations, financial planning, employee behaviour, guest communication and long-term business development.

## **Integrated Recommendations for Public and Private Stakeholders**

The findings from the previous analysis, the survey results and the ISO 14001 framework show that environmental quality management in tourism should be developed gradually, through practical and realistic steps. The tourism and hospitality sector in the Municipality of Medijana already applies several basic environmental measures, especially in the fields of energy saving, water saving and local food sourcing. However, the sector still lacks formal environmental policies, responsible persons, systematic monitoring, staff training and structured preparation for certification.

For this reason, recommendations should address both private tourism and hospitality businesses and public sector entities responsible for local development, environmental protection, tourism promotion and institutional support.

### **Recommendations for private tourism and hospitality businesses**

Private tourism and hospitality businesses should first introduce basic environmental governance at enterprise level. This does not need to be complex, especially for micro and small enterprises. The first step should be the adoption of a simple environmental policy that confirms the commitment of the business to reduce environmental impacts, comply with relevant requirements and improve environmental performance over time.

Each business should appoint a responsible person for environmental matters, even if this responsibility is part-time or combined with other duties. The role of this person should be to monitor energy, water and waste, coordinate basic environmental actions, communicate with employees and support preparation for future certification. This is especially important

because the survey showed that only a very small share of businesses currently have a designated person responsible for environmental quality management.

Businesses should introduce simple monitoring routines for electricity, water and waste. Monitoring should be practical and adapted to the size of the business. For example, restaurants and cafés can monitor electricity and water bills, food waste, packaging waste and used cooking oil. Accommodation providers can monitor heating and cooling energy, water consumption, towel and linen reuse, waste separation and cleaning product use.

Staff training should become a regular part of environmental management. Employees should understand how to save energy and water, separate waste, prevent food waste, handle cleaning products, manage used cooking oil and communicate environmental measures to guests. The ISO 14001 source material emphasises that employee education and involvement are essential for achieving environmental objectives and applying new knowledge in practice.

Food-service businesses should give particular attention to food waste management. Since restaurants and cafés dominate the local sample, practical measures should include better stock control, portion management, menu planning, use of seasonal and local products, donation of surplus food where possible, composting or separate collection of organic waste where available, and proper handling of used cooking oil.

Accommodation providers should focus on water and energy efficiency. Measures should include efficient heating and cooling systems, LED lighting, smart control of air conditioning where possible, low-flow taps and showers, towel and linen reuse programmes, guest information and regular maintenance of equipment. These measures are directly connected with both environmental protection and operational cost reduction.

Travel agencies and tour operators should focus on sustainable tour design, low-impact transport options, selection of environmentally responsible partners and visitor education. They can also support environmental certification by encouraging hotels, restaurants and activity providers to adopt recognised environmental practices.

## **Recommendations for public sector entities**

Public sector entities should create an enabling environment for tourism and hospitality businesses to improve their environmental performance. This includes local authorities, tourism organisations, environmental institutions, public utility companies and other relevant bodies.

A key recommendation is to establish a local green tourism support programme tailored to the needs of Niš and the Municipality of Medijana. This programme should provide practical tools, training, technical assistance and recognition for businesses that gradually improve their environmental performance. The programme should be designed for micro and small enterprises, since they represent the majority of the local sector.

Public sector entities should provide simple templates and guidance documents, including:

- basic environmental policy template;
- checklist for energy, water and waste monitoring;
- food waste reduction checklist for restaurants and cafés;
- towel and linen reuse guidance for accommodation providers;
- waste separation instructions;
- guest communication examples;
- basic preparation checklist for ISO 14001, Green Key or other certification schemes.

Financial support is also necessary. The survey showed that financial assistance and subsidies are the most requested form of support. Public sector entities should therefore

consider grants, co-financing schemes, favourable loans or tax-related incentives for investments in energy efficiency, water-saving equipment, waste management, monitoring tools and environmental certification preparation.

Training and workshops should be organised regularly. These should be practical rather than theoretical and should focus on issues that businesses can immediately apply: saving energy, reducing water use, managing food waste, separating waste, using local suppliers, communicating with guests and preparing basic documentation for environmental management.

Public sector entities should also promote businesses that introduce environmental measures. Local recognition, green maps, public listings, promotional campaigns or staged readiness labels can increase visibility and motivate businesses to participate. This is especially important because customer demand for green services is still not strong enough to drive change on its own.

## Certification readiness pathway

The report findings show that immediate full certification may be too demanding for many local businesses. Therefore, certification should be approached as a gradual process.

The first stage should be **basic readiness**. Businesses should define an environmental policy, appoint a responsible person, identify their main environmental aspects and start monitoring basic indicators such as energy, water and waste.

The second stage should be **operational improvement**. Businesses should introduce practical measures such as energy-saving equipment, water-saving devices, food waste reduction, separate waste collection, local sourcing, guest information and employee training.

The third stage should be **preparation for certification**. At this stage, businesses can begin aligning their practices with ISO 14001, Green Key, EMAS or other relevant environmental schemes. ISO 14001 can provide the general environmental management framework, while tourism-specific labels may be more directly visible to guests.

This staged approach is more realistic for micro and small enterprises because it reduces the initial burden and allows them to progress step by step.

## Strengthening public-private cooperation

The survey findings show that public-private cooperation in the field of environmental management and sustainable tourism is currently weak. Businesses do not perceive existing cooperation mechanisms as sufficiently effective, while a significant share of respondents expressed the need for stronger or new partnerships.

For this reason, it is recommended to establish a local coordination platform or advisory body for green tourism. This body could include representatives of the city, municipality, tourism organisations, hospitality businesses, accommodation providers, travel agencies, environmental experts and relevant public utility services.

The role of this platform should be to:

- coordinate environmental initiatives in tourism;
- identify priority needs of businesses;
- support training and workshops;
- connect businesses with funding opportunities;
- promote certification readiness;

- address common problems such as waste, wastewater, drainage, water quality and climate resilience;
- monitor progress of local green tourism activities.

Such cooperation would help prevent environmental initiatives from remaining fragmented or dependent only on short-term projects.

## Overall recommendation

The overall recommendation is to move from individual environmental measures toward structured environmental quality management. The local sector already has a foundation, but it needs organisation, knowledge, financial support and institutional coordination.

Private sector entities should start with simple internal systems: policy, responsibility, monitoring, training and operational improvements. Public sector entities should provide the support environment: guidance, training, subsidies, promotion and coordination.

Together, these measures can create a realistic pathway toward environmental certification and stronger environmental performance in the tourism and hospitality sector.

## Final Phase: Thematic Workshop on Environmental Quality Management and Certification

As the final phase of this process, a thematic workshop on **Environmental Quality Management and Certification in the Tourism Sector** will be organised. The workshop will serve as a practical follow-up to the analysis presented in this report and will provide an opportunity to discuss the main findings with relevant local stakeholders from the tourism, hospitality, public and expert sectors.

The purpose of the workshop will be to present the key conclusions of the previous analysis, the survey findings and the ISO 14001 framework in a practical and understandable way. The workshop should not be limited to a general presentation of environmental protection concepts, but should focus on the specific needs of tourism and hospitality businesses in Niš and the Municipality of Medijana.

The workshop will address the fact that many local businesses already apply basic environmental measures, such as energy-saving practices, water-saving measures and local food sourcing, but still lack formal environmental management structures, responsible persons, systematic monitoring and certification readiness. The survey findings show that businesses need practical support, especially through financial assistance, training, workshops, technical guidance and stronger cooperation with public institutions.

### Objectives of the workshop

The main objectives of the workshop will be to:

- present the main findings of the environmental quality management analysis;
- present the survey results related to current practices, barriers and support needs;
- explain the relevance of environmental certification schemes, including ISO 14001;
- introduce practical measures applicable to hotels, restaurants, cafés, travel agencies and other tourism-related businesses;

- discuss barriers to certification and possible ways to overcome them;
- encourage stronger cooperation between private businesses and public sector entities;
- define possible next steps toward a local green tourism support model.
- The workshop will also help local businesses better understand that environmental quality management is not only a formal certification issue, but also a tool for reducing operational costs, improving resource efficiency, strengthening competitiveness and preparing for future market and regulatory expectations.

## Proposed workshop topics

The workshop should cover the following thematic blocks:

**Environmental quality management in tourism** This part will present the main environmental pressures in tourism, including energy consumption, water use, waste generation, wastewater, air emissions, food waste, procurement and transport. It will also introduce the role of Best Environmental Management Practices in improving environmental performance across the tourism sector.

**Survey findings for Niš and Medijana** This part will present the main local findings, including the profile of surveyed businesses, current environmental practices, awareness of certification schemes, main barriers and preferred forms of support. Special attention should be given to the fact that the local sector is dominated by micro and small enterprises, especially restaurants and cafés, which means that support measures must be practical, simple and adapted to limited resources.

**ISO 14001 and environmental certification** This part will explain ISO 14001 as a framework for environmental management. It should present the basic logic of the standard: environmental policy, identification of environmental aspects, compliance obligations, objectives, implementation, monitoring, corrective actions and continual improvement. The ISO 14001 source material emphasises that the standard is applicable to different types of organisations and supports better environmental protection, rational resource management, improved communication, legal compliance and business efficiency.

**Practical measures for tourism and hospitality businesses** This part should focus on measures that businesses can realistically implement, such as monitoring electricity and water consumption, reducing food waste, improving waste separation, managing used cooking oil, introducing towel and linen reuse, using local suppliers, training employees and communicating environmental practices to guests.

**Public support and cooperation** The final thematic block should focus on the role of public sector entities, including local authorities, tourism organisations and relevant institutions. The discussion should cover possible support mechanisms such as training, subsidies, technical assistance, local recognition schemes, guidance documents and public-private cooperation platforms.

## Target participants

The workshop should include representatives of:

- hotels and accommodation providers;
- restaurants, cafés and other hospitality businesses;
- travel agencies and tour operators;
- cultural and tourism-related institutions;
- local authorities and public sector entities;
- tourism organisations;

- environmental experts and consultants;
- public utility and infrastructure-related services, where relevant.

The participation of both public and private sector representatives is important because environmental quality management in tourism cannot be improved by individual businesses alone. Waste management, water and wastewater infrastructure, local promotion, certification support and climate resilience require coordinated action.

## Expected outputs of the workshop

The expected outputs of the workshop include improved understanding of environmental quality management and certification, better awareness of ISO 14001 and other relevant schemes, identification of priority environmental measures for local businesses and collection of feedback from participants.

The workshop should also provide a basis for future activities, including the possible development of a local green tourism programme, preparation of simple guidance materials, organisation of additional training and gradual preparation of interested businesses for certification.

As the final phase, the workshop will connect the analytical results of this report with practical implementation. It will help transform the findings into concrete local action and support the transition from individual environmental measures toward structured environmental quality management in the tourism and hospitality sector.

## Conclusion

Environmental quality management in the tourism sector is an important requirement for destinations that aim to develop tourism based on cultural heritage, natural resources, urban services and long-term competitiveness. The analysis presented in this report shows that tourism and hospitality activities are closely connected with energy consumption, water use, waste generation, wastewater, air emissions, transport, procurement and the quality of local infrastructure.

The previous analysis of the tourism sector confirms that environmental improvement requires action across different groups of tourism-related entities, including accommodation providers, restaurants and cafés, tour operators, destination managers and public sector entities. Best Environmental Management Practices provide a practical basis for addressing the main environmental aspects of tourism, including water consumption, waste management, energy use, food and drink services, supply chains, events and destination-level management.

The local survey findings show that the tourism and hospitality sector in the Municipality of Medijana has already introduced several basic environmental practices. Many businesses apply energy-saving measures, water-saving measures and local food sourcing. However, the same findings also show that these practices are mostly individual and operational, while formal environmental management structures remain weak. Awareness of certification schemes is low, very few businesses have taken steps toward certification, and only a small number have a designated person responsible for environmental quality management or include environmental topics in strategic planning.

The main barriers to further improvement are financial limitations, lack of knowledge and staff training, insufficient technical support, weak public-private cooperation and limited customer demand for greener services. These barriers are especially important because the

local sector is dominated by micro and small enterprises, particularly restaurants and cafés, which often have limited resources and need simple, practical and affordable solutions.

ISO 14001 provides a suitable framework for moving from isolated environmental measures toward systematic environmental management. The standard is applicable to different types of organisations, regardless of size or activity, and supports better environmental protection, rational resource management, legal compliance, improved communication and continual improvement. In the tourism and hospitality sector, ISO 14001 can help businesses identify environmental aspects, assign responsibilities, monitor performance, train employees and gradually prepare for certification.

For hotels, restaurants, accommodation providers and other tourism-related businesses, environmental management should be directly connected with daily operations. This includes energy and water efficiency, waste prevention and separation, food waste management, proper handling of used cooking oil, control of emissions and odours, sustainable procurement, employee education and guest involvement. These measures are not only environmental obligations, but also opportunities to reduce costs, improve service quality and strengthen competitiveness.

Public sector entities also have an important role. Local authorities, tourism organisations and relevant institutions should support businesses through training, practical guidance, financial incentives, technical assistance and stronger cooperation mechanisms. A local green tourism support programme, adapted to the needs of micro and small enterprises, would help businesses gradually move toward environmental quality management and certification readiness.

As the final phase, the thematic workshop on Environmental Quality Management and Certification in the Tourism Sector will connect the findings of this report with practical implementation. It will provide an opportunity to present the results, discuss barriers and support needs, explain the relevance of ISO 14001 and other certification schemes, and define realistic next steps for local tourism and hospitality businesses.

Overall, the Municipality of Medijana and the wider City of Niš have a clear foundation for further development of environmental quality management in tourism. The next step is to transform existing basic practices into a structured system based on responsibility, monitoring, training, public-sector support and gradual preparation for certification. This approach can strengthen environmental performance, reduce operational costs, improve resilience and support the long-term sustainable development of the local tourism sector.