COMPENDIUM OF BEST PRACTICES

A brief report on sustainable tourism practices

TOURISME

WATER SAVING

Improving Sustainability of Tourism SMEs Through Knowledge Transfer, International Cooperation and Multi-Stakeholder Engagement

Co-funded by the COSME programme of the European Union

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ISTITUTO DI MANAGEMENT Sant'Anna

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INTRO DUCTION

Supported by the COSME programme of the European Union, this project revolves around the symbolics of windows. Not only they are associated with cars, trains and planes as well as also hotel rooms, but after all they represent opportunities, visions and inspirations- exactly what the TouriSME project wants to bring to SMEs operating in the field of tourism.

WATER SAVING

It is reported that a tourist's consumption is usually higher than a resident's water consumption. Indeed, a European tourist consumes around 300 liters per day compared to a European resident consumption of 100 – 200 liters per day. Although statistical data for water use in the tourism sector (as a whole) is lacking, it is obvious that water use in hotels and similar accommodations is the highest compared to other tourism organizations.

WATER SAVING

The reasons for higher tourist water consumption in hotels and similar accommodations include maintenance of grounds (irrigation), daily room cleaning, daily laundry, maintenance of swimming pools, intensive kitchen activities, and a pleasure approach to showers and baths.

Although the share of tourism in global total water consumption is less than 1%, it contributes significantly to water stress in hotspot areas, especially the Mediterranean within Europe. It is worth noting that average tourist water consumption in European sun-holiday destinations in 2007 ranged from 149 liters per guest per night on the Spanish Balearic Islands to 450 liters per guest per night on the Greek Aegean islands, but water consumption up to 880 liters is quoted for luxury tourism in Majorca.

Water typically accounts for approximately 10% of the utility bills in hotels but can vary considerably across different types of accommodation. The major areas of water consumption in accommodation are guest bathrooms, kitchens, laundry facilities, and communal toilet

Installation of water-efficient bathrooms fixtures

Tourism sector activities:

- Hotels and Similar Accommodations
- Holiday and other short-stay accommodation

Description of the initiative:

Hotel operations — particularly the kitchen, laundry, and bathrooms are completely dependent on water for everyday operations. For the record, the average water consumption per guest per night ranges from 394 liters in Europe, 839 litres in Barbados, 313 liters in Australia and New Zealand to 677 liters in South East Asia.

Bathrooms account for about 40% consumption of water in hotels. Therefore, water conservation and efficiency measures such as the installation of water-efficient fixtures in the bathrooms of hotels and similar accommodations are crucial. The installation of water-efficient fixtures selected through green procurement is the most effective approach.

The Yök Casa Cultura in Barcelona (Spain) installed Roca's L20 series of showerheads and faucets. They are equipped with aerators and Cold Start, meaning the hot water is only triggered if the handle is moved to the left. Most taps fire up the hot water every time whenever the handle is lifted in the middle position, wasting energy unnecessarily. They also installed toilets having a dual-flush system as it is the easiest for guests from all different cultures to understand without having to leave instructions.

More info:

European Commission

Yök Casa Cultura

Roca

Collection and use of rainwater

Tourism sector activities:

- Hotels and Similar Accommodations
- Holiday and other short-stay accommodation

Description of the initiative:

Rainwater collection systems divert rainfall water into storage tanks. Run-off systems can be installed on roofs and other impervious surfaces. Harvested rainwater should ideally be used for laundry operations, but it can be used for non-potable demand such as toilet flushing, irrigation, cooling towers, or general cleaning purposes.

Although rainwater harvesting is not widely practiced, this practice can reduce total utility costs of hotels located in rainy climate areas by up to 35%. The use of rainwater in laundries minimizes or eliminates the use of water softening columns, reduces chemical consumption in laundry operations, and improves the quality of the laundry effluent, and facilitates its reuse for irrigation.

100 Accor hotels have installed rainwater recovery tanks to supply irrigation or car washing applications. A rainwater recycling system installed in the 250-room ETAP city-center hotel in Birmingham (UK) saves up to 780 m^3 of potable water per year (5-10% of consumption). This saving equates to about 6% of best practice water consumption for this size of the hotel.

More info:

European Commission

Green Ideas for Tourism

Hagler Bailly Services

Optimising laundry operations

Tourism sector activities:

- Hotels and Similar Accommodations
- Holiday and other short-stay accommodation

Description of the initiative:

Large-scale professional laundry operators can provide a more efficient alternative to on-site laundry operations. Efficient large-scale and commercial laundry operations with a capacity of hundreds to thousands of tonnes of laundry per year typically achieve water use efficiencies of 5-6 liters of water per kg of linen, compared with in excess of 20 liters per kg for non-optimized small-scale laundry operations. Therefore, hotels may consider outsourcing their laundry operations.

The best practice for large hotels (over 500 rooms) and outsourced laundry providers is to operate continuous batch washers (CBW) with the counter-flow current. Another best practice is to recover energy from steam used in the drying process. Equipment-based recommendations include using front-loading washers that consume 40% less water than top-loading machines, using washers with adjustable load-size settings, and investing in a laundry water recycling system if the laundry supports more than 250 - 350 rooms. The laundry water recycling systems available on the market are generally expensive but can reduce water and energy consumed in washers by up to 50%. Typical operations-based recommendations include pre-sorting heavily stained items to minimize reprocessing, counting or weighing items to ensure that washers are loaded to capacity, tracking load sizes in a log to monitor the average loading of the laundry's washers, and consolidating loads and processing them in the largest possible washer.

More info:

European Commission

Hagler Baily Services

Tourism sector activities:

Hotels and Similar Accommodations

Optimizing garden operations

Description of the initiative:

Gardens are an important asset to hotels, but hotels usually do not have a specific budget for their gardens, nor they do analytical costing for the maintenance of their gardens. Most hotels do no record actual planting and irrigation and so water consumption remains unknown to them.

It is estimated that most hotels in Jamaica use 10% - 20% of their total water supply to irrigate their lawns and gardens. Therefore, proper garden operations are crucial to ensuring the overall water efficiency of a hotel. Standard water conservation measures in gardens include using compost and mulch to improve the water retention characteristics of the soil and reduce evaporation in garden beds, irrigating lawns and gardens in the early morning hours to minimize evaporation, and controlling sprinkler operations with the use of timers and rain gauges. Although more complex, the use of greywater from sinks, showers, and laundry for irrigation can reduce a hotel's water consumption by up to 20%.

Some hotels are eager to run gardens for growing vegetables to enrich their kitchen. Gili Lankanfushi hotel in Malé (Maldives) cultivates vegetables and herbs in the backyard garden. Several other hotels by adopting a sustainable gardening approach are cooking several delicious meals too. Naturhotel Leitlhof hotel in San Candido (Italy) produces potatoes in their garden to cook a variety of meals for their guests.

More info:

European Commission Joint Research Centre

Authors: Tiberio Daddi, Owais Khan, Nicola Bellini (Sant'Anna School of Advanced Studies)

Contributors: Michelle Perello, Javier López-Murcia, Cira Mendoza (Consulta Europe Projects and Innovation), Lucía Dobarro, Teresa Rodríguez and Pilar Guerra (Instituto Tecnológico de Canarias), Francesco Lembo, Erneszt Kovács (ACR+), Roberto Doneddu, Antonio Agabio (Autonomous Region of Sardinia); Ivana Russiello, Chiara Senfett (Sistemi Informativi Confindustria), Maxime Kayadjanian, Marion Tillet (L'Institut Paris Region), Eleftherios Loizou, Anna Andreou (Nicosia Development Agency)

Design and layout: Erneszt Kovács (ACR+)

Image sources: Freepik, Pixabay, Flickr, Hippopx, Piqsels, Wikimedia Commons, PxHere, URBAN-WASTE, DECISIVE, Ursula Bach

July 2021

This Compendium was based on a much more extensive one, with 100+ examples of good practices coming from across the world, existing in many different sectors and trageting various aspects of environmental management. The detailed Compendium publication can be found here.

www.tourisme-project.eu

info@tourisme-project.eu

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