COMPENDIUM OF BEST PRACTICES

A brief report on sustainable tourism practices

TOURISME

ENERGY 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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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.

TOURISME

The tourism industry is a significant contributor to global energy consumption and associated carbon emissions. Whilst the 5.45 million hotel rooms in Europe represent half the global total number, European accommodations are estimated to be responsible for just 21% GHG emissions arising from accommodations globally, suggesting better than average energy-efficiency in European accommodations.

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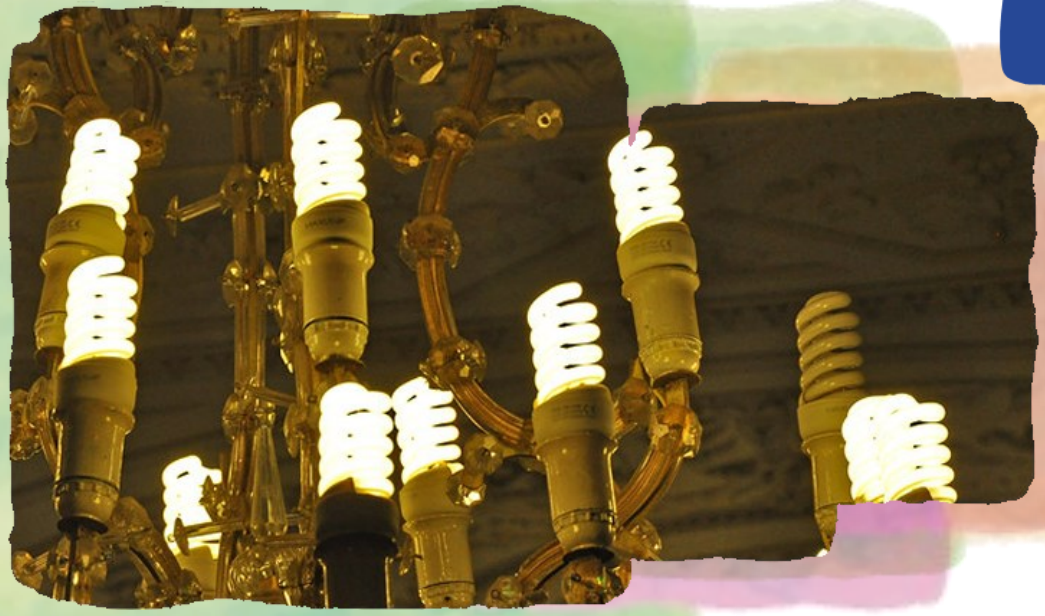
Despite good energy performance of European accommodations, compared to their those elsewhere, energy-efficiency has been traditionally considered a low priority for most accommodations, and there is considerable scope for energy savings in this sector, contributing to cost and carbon emission reductions.

The total energy consumption for a typical hotel and the proportion of energy sourced from electricity compared with fuels such as natural gas, propane, liquid petroleum gas, and fuel oil, varies considerably across accommodations depending on the level of services offered, building design, climate occupancy, local energy infrastructure, and local regulations. Electricity accounts for approximately 40% of the energy consumed in a hotel Of this, approximately 45% is used for lighting, 26% for HVAC, 18% for other, 6% for water heating, and 5% for food services. In short, there is a great potential for energy conversation across the hospitality industry. Hotels and similar accommodations may undertake several technological and non-technological practices to minimize energy consumption in guest areas, laundries, kitchens, and so on.

Use of CFL and LED lighting

Tourism Sector Activities:

- Hotels and Similar Accommodations
- Holiday and other short-stay accommodation
- Travel agencies and tour operators
- Other reservation service and related activities



Description of the initiative:

Whatever time of the day, lights are usually on and shining within a hotel. Typically, lighting accounts for 15 - 45% of electricity consumption in small hotels. With so much electricity being utilized every hour, hotels could benefit by investing in LED lighting. Installing LED lights in lobbies, guest rooms, bars, and even in the basement will all yield surprising results.

LEDs have a great number of benefits – they are energy efficient (uses 75% less energy), emit low heat radiation, are dimmable, start instantly, and can provide directional light. LED bulbs will last at least 50,000 hours after being installed which denotes that a noticeable decrease in output will not happen for over 6 years. This, in turn, helps significantly cut down the maintenance costs that are connected with lighting.

More info:

Eco-Management and Audit Scheme

No Grey Area

Tourism Sector Activities:

Hotels and Similar Accommodations

Holiday and other short-stay accommodation

Installation of solar panels for electricity

Description of the initiative:

Hotels and similar accommodations are considered as the biggest energy consumers in the building sector, considering the number of rooms they have. Renewable energy has been adopted by business owners across various industries including the hospitality industry.

By installing solar panels on rooftops or on the ground, hotels can generate their own electricity. Moreover, the installation period is just 2 to 3 weeks. It is a relatively short process, so hotels usually do not have to shut down during the construction period. The payback can happen as quickly as 5 years after installation. As solar technology becomes more mature, the costs of solar PVs keep decreasing year after year, making solar energy more affordable, even to small hotels. Many hotels in the world already installed solar panels which were proven to be very beneficial for them.

Marriott-Lancaster (USA) installed solar panels producing 1.2 million kWh per year, just over the 1.18 million used by the hotel's 133 rooms. With no utility bill, the hotel stands to see a great return on its investment.

Hampton Inn Bakersfield (USA) has been saving $8000 per month through the installation of solar panels.

More info:

Coastal Solar

Hospitality Technology

Daylight harvesting

Tourism sector activities:

- Hotels and Similar Accommodations
- Travel agencies and tour operators
- Holiday and other short-stay accommodation
- Other reservation service and related activities

Description of the initiative:

Daylight harvesting in hotels or offices is an energy management technique that reduces overhead lighting use by utilising the ambient (natural and artificial) light present in a space and dimming or switching off lighting when sufficient ambient light is present or when the space is unoccupied.

Daylight harvesting saves electricity costs and provides the health benefits of correct lighting.

Starwood Hotels & Resorts in China following the same approach installed a wall-mounted counter that alerts guests on how much electricity they are using, allowing them to turn off lights to help the environment

More info:

Leviton

Loytec

Stamford Advocate

Installation of secondary glazing windows

Tourism sector activities:

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

Description of the initiative:

Studies show that roughly half of a hotel's energy consumption is used for heating. Many hotels and B&Bs inhabit traditional buildings with single glazed windows that provide poor thermal insulation. Also, many hotels are usually situated near a busy road or within a noisy city center and thus receive complaints from guests.

Secondary glazing has become has essential for many hotels and B&Bs as it offers a wide range of benefits including enhanced thermal and acoustic insulation. Secondary glazing doesn't just stop noise entering the building, it substantially lowers energy consumption and thus decreases heating costs. As it acts as a second barrier it prevents cold draughts from drawing warm air out of the guest rooms, it also seals in the warmth-air making hotel rooms warm up faster. This can lower the carbon footprint of the building and hotels and B&Bs can reduce annual heating costs too. Secondary glazing includes two efficient draught seals and with a low emissivity glass, heat loss can be reduced by up to 65% and noise levels by as much as 80% giving hotel guests a peaceful night's sleep.

More info:

Arctic Glaze

PBC Today

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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.

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