# 5th International Conference on Environmental Design and Health, ICED2024



## Economic evaluation of consumer environmental-energy preferences in the hotel industry **Agricultural university of Athens** Konstantinos Velaoras, MSc, PhD candidate

Scientific targets
To study the environmental consciousness of customers in hotels

To investigate if there is a correlation between hotel selection and a hotel's environmental or energy policy

To study the hotel customer's behavior in relation to a hotel's environmental policies

Discovering the gap between theoretical discourse on sustainability and on the ground realities in the tourism sector, the study offers insights into the feasibility & desirability of adopting environmentally friendly measures in the hospitality industry.

quality, safety, environmental sensitivity, or social responsibility. Certification is granted by independent organizations following inspections and audits.

#### Environmental Certification

Environmental certification for a hotel is a specific category of certification that focuses on evaluating the hotel's environmental practices and performance. This certification confirms that the hotel implements policies and practices that reduce its environmental footprint, promote sustainability, and contribute to environmental protection.

**Energy Certification** Energy certification for hotels is a process that evaluates the energy efficiency of a hotel complex. Its purpose is to determine the building's energy consumption and the efforts made by the hotel to reduce the energy consumed. It examines how effectively energy is used and what measures are applied to reduce energy consumption.

#### Types of Environmental and Energy Certifications in the Hospitality Sector

- ISO 14001 ISO 50001
- Green Key
- EU Ecolabel
- EarthCheck
- European Hospitality Quality (EHQ) Sustainable Tourism
- Green Globe







Methodology used:
Through a comprehensive questionnaire surveying hotel customers, the research explores their environmental preferences shedding light on the practical implications of incorporating eco-friendly practices in tourism establishments.

### Questionnaire







#### RESULTS

The results are based on 100 responses and provide information on various demographics and participant views on hotels

Age: Ranges from 20 to 63 years, with the largest proportion being between 37-52 years. Martial status: 47 married, the rest single. Children: 57 people have no children, and the rest have 1, 2 or 3 children

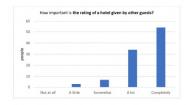
Education: 80 people have completed university, while 45 of them have a master's degree. Professional sector: 53 private employees, 20 freelancers, 12 civil servants. Residence: 46 live in cities with a population of 1,000,000 -6,000,000 inhabitants, while 15 live in rural areas.

### Travel and Hotel Reservations

94 people have visited Europe (40 over 6 European countries), 40 America, 35 Asia, 20 Africa, 4 Australia and 1 New 68 people make reservations online. 10 through the hotel website. 13 call the hotel and 4 ask a friend to do the booking

### Preferences and Opinions about Hotels

Hotel Stars: 14 people consider it very important how many stars the hotel has. Hotel Rating by Guests: 54 people consider this very important.

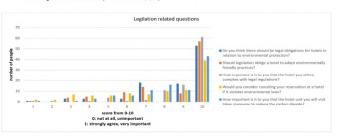


Environmental friendliness: 40 are aware of the environmental conditions required for a hotel, while environmental friendliness is rated as moderately important by 41 people.

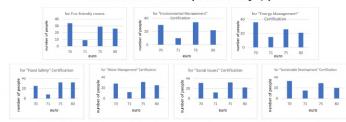
### Legislation related results.

- · Legal Obligations: 53 people believe that there should be legal obligations for environmental protection by hotels
- Compliance with Laws: 61 people are interested in whether the hotel complies with laws (in general)

  Cancellation of Stay: 39 people would cancel their stay if they knew that the hotel was in violation of environmental
- Reduction of Energy Consumption: 43 people want legislation to compel hotels to reduce their energy consumption.
- There is a clear preference for Environmentally Friendly Hotels
- It is important that the hotel recycles its waste.
- It is not enough for a hotel to comply with the law, many would cancel their stay if they knew that a hotel was violating environmental laws (the 60 rated it 8,9,10)



### Assume that a night's stay in the typical hotel is 70 euros. How much is the maximum amount you would be willing to pay



### Results from willingness to pay questions.

- The least popular answer for every question: +1 euro of the original room price
  The invost popular instreet.

  Not willing to pay more for: environmentally friendly rooms, for energy management certification and for Sustainable
- Willing to pay +5euros for:Environmental Management, for Food Safety, for Water Management and for Social Certificate 18 people answered to everything that they are not willing to pay more while 13 people answered that they will pay +10 euros
- 46 people would give even one euro (71 or 75 or 80 euros) (percentage 46%)
- Combined the answers of +5 euros and +10 euros are always higher than the answer that: Not willing to pay more
   The most popular certificate: Food Safety Certification
   Least popular certificate: Energy management Certification