

## Towards an eco-efficient hotel industry



Data of Your Paper



### Topic

- Resilience
- Lifestyle
- Building
- Resources
- Tourism
- Energy

### Title of the Paper

[Towards an eco-efficient hotel industry](#)

### Form of Presentation

- Poster
- Presentation

### Short Description (maximum 2500 characters)

The tourism industry is growing steadily and further growth is predicted for the future. This has led to huge investments and increasing operating costs for accommodations. In the hotel industry, however, real estate investors and hotel operators are often different entities, with different objectives and goals. Real estate investments are therefore often calculated and planned with narrow margins and with a focus on minimised investment costs what results in inefficient operational costs and higher overall costs. The reason is that low-cost and inefficient technical installations and devices often to higher overall consumption of resources lead due to higher operating costs, more frequent replacement and intensive maintenance requirements. Inefficient operation practices of poorly trained staff of kitchens, laundries and HVAC devices increase the costs additionally.

Due to its high specific resource consumption compared with a domestic benchmark, the hotel sector therefore in general has large saving potentials. To improve eco-efficiency and become more competitive resources have to be used more efficiently while also reducing the negative impacts on the climate and environment. Unsurprisingly, the worldwide demand for solutions, which increase the eco-efficiency, is growing. Some programs for the tourism industry have already been launched from the private and public sector. However, despite the saving potentials has the implementation rate of suggested measures been rather low.

Together with an industrial partner the Institute for Ecopreneurship is developing a hotel-specific assessment and implementation tool to address these short-comings. The tool will allow to identify the financially and environmentally relevant processes but also to propose adequate measures based on best-available-technology, to quantify their benefits, to support their effective implementation and monitor the result.

The applied approach of environmental accounting (EA) helps to represent the costs in a transparent and more convincing way for decision makers. EA has been used so far in the manufacturing industry, where waste is regarded as a non-product output. With this method the costs of the product but also of the non-product, including wasted materials, capital and labour are accounted for and used together with traditional

environmental protection costs as a basis for a comprehensive decision making. The challenge will be to adapt this concept to the hotel industry.