

Towards Nearly Zero Energy Hotels

Lighthouse Examples

Boutiquehotel Stadthalle, Vienna - Austria



LIVING AND BREATHING GREEN

“Wellbeing and comfort can very well be combined with ecological thinking and a sustainable lifestyle without needing to abstain from anything.

The investment is paying off: “Normally in a 3-star hotel in Austria, the energy benchmark is around 6-7%, but we have 2% energy costs. So, it really saves money. We have nearly doubled our staff number. We had 18 before, and now we have about 35-36. **We save 21,000 kg in carbon dioxide emissions annually.** Our annual 16,000 guests are fantastic ambassadors and this has made us **a model for the green tourism industry**”.

Michaela Reitterer - Boutiquehotel Stadthalle owner

The story of the Boutiquehotel Stadthalle

The key success factor to achieve nearly zero energy (nZE) status at the Boutiquehotel Stadthalle is led by the tenacity and commitment to the environment and the "green way of life" of the owner Michaela Reitterer.

The process started in 2001 when Michaela bought the hotel, a XIX century historical building. As she was inflexible in realising her vision and reaching high environmental goals, she started with energy efficiency renovations of the historical building. Afterwards, she continued by constructing an annexed building based on passive standards towards the nZE requirements. Despite the financial risk-taking and the lack of support from local authorities, Michaela persisted in her decision: *"This choice was the right thing to do and it had to be done at that time"*.

A coherent path towards sustainability and the environment was more important for the hotel's competitiveness than a short-term fulfillment of pure economic indices.

Facts

First eco - friendly hotel in Vienna

Location

In an urban area

Year of construction

2009 (first opening of the passive house)

Number of guest rooms

78 (40 in existing building, 38 in the newly built passive hotel)

No of beds

156

Type of package offered

B&B

Hotel official rating [stars]

3 ***

Occupancy rate

over 75%

Offered facilities

Lounge/bar

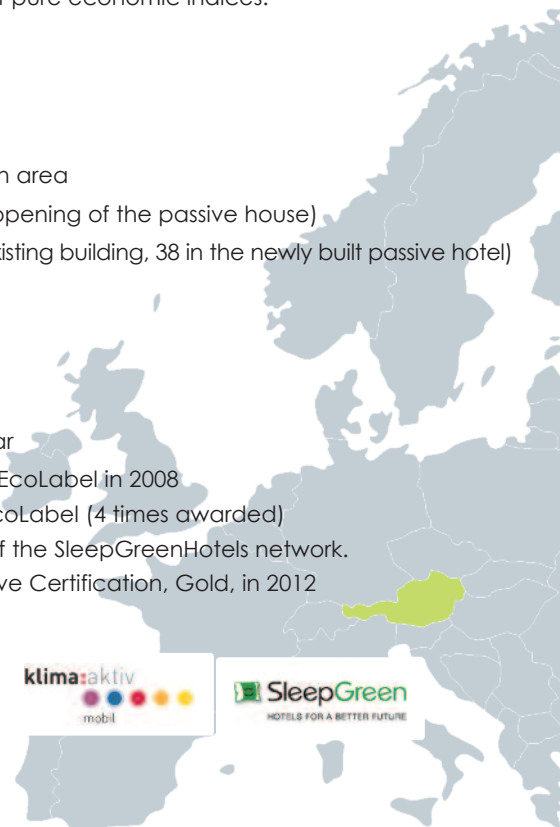
Environmental labels - awards

European EcoLabel in 2008

Austrian EcoLabel (4 times awarded)

Member of the SleepGreenHotels network.

Klima. Aktive Certification, Gold, in 2012



Towards "zero energy balance"

ENERGY EFFICIENCY & ENVIRONMENTAL MEASURES

- **RES Electricity:** Integrated photovoltaic system of 13 kW and 3 wind turbines
- **RES Heating:** 130 m² solar thermal panels, producing enough hot water for the whole hotel (depending on the weather); ground source heat pumps
- **RES Cooling:** Geo-cooling (cooling with geothermal heat pump)
- **Efficient Lighting:** 100% of low energy lights; automatic lighting controls in public spaces
- **Efficient controls:** Programming heating, ventilation and air-conditioning (HVAC) controls to match occupancy patterns; use of energy saving key cards for guestrooms.

Additional measures:

- Water from the hotel's well is used to water the garden and to flush the toilets
- A green rooftop (of lavender and rose plantations) decreases the air-conditioning needs
- Waste prevention and sorting policy. Organic waste composting
- Beneficial rates for guests arriving by train or bicycle.

Lessons learned from Boutiquehotel Stadthalle

IMPROVE COMPETITIVENESS

Despite the economic crisis, the Boutiquehotel Stadthalle was able to maintain a high and constant occupancy rate; guests choose this hotel, due to its eco-friendly nature.

- **Fidelity index** (customer loyalty) **doubled** after refurbishment.

SOCIO - ECONOMIC BENEFITS

Positive effects on employment: number of staff increased from 18 to 35 after refurbishment.

RETURN ON IMAGE:

Positive publicity gained; widespread reputation of the hotel. *"This refurbishment was the best idea I could have ever had! This is a small hotel, in an ugly street, but now everyone in Austria knows us!"*

RETURN ON INVESTMENT

The investment included the construction of the new passive section of the hotel and the retrofit of the existing building. The hotel saved operational costs and was able to increase the room rates as some guest segments are willing to pay more for the commitment in sustainability. *"Thanks to our retrofit actions, we gained a one page article in the Financial Times and a 4-page reportage on National Geographic, which gave us a lot of unexpected (and free) visibility. These aspects may not be considered a direct return on investment, but in fact they are".*

WHY BECOME A neZEH?



ENERGY

- Reduce your operational & maintenance costs.
- Increase independence from energy suppliers.
- Improve your energy efficiency; take advantage of funding opportunities.



BRANDING

- Attach the green concept to your brand image.
- Gain visibility in a new market segment: the "sustainability market".
- Increase your competitive advantage.



ADD VALUE

- Reduce your carbon footprint.
- Meet your corporate and social responsibility targets.
- Increase living comfort and innovate in guests' experience.
- Increase your customers' loyalty.

WHAT IS A NEARLY ZERO ENERGY BUILDING

A nearly Zero-Energy Building (nZEB) is a building that has a very high energy performance. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby.

EPBD recast, Article 2

Join the neZEH network at www.nezeh.eu

you will have access to the latest information on technology solutions, financing and legislation and to experts' advice.

The neZEH Consortium



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