

# Train the Trainer Workshop



**EE4HORECA**

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# How to communicate Energy Efficiency?

## Change causes resistance

New climate protection targets along the entire value chain mean a change in a company's accustomed processes: New processes, new investments, and also new behaviour patterns for the staff and the clients are required.

The conflict between the old, familiar and the new, still unfamiliar may imply resistance by the staff, but also by the clients.

**Motivation** is a necessary means

... to resolve this conflict

... to overcome barriers to energy efficiency and climate protection activities

# Barriers

- Lack of financial resources (*We have to focus on core investments*)
- Lack of time (*We have to focus on core business*)
- No demand for improvement (*We perform well / we anyway do our best*)
- Proxy wars (*The others – e.g. the management – have no idea about our problems*)
- Pretended incompetence (*I have no idea what that all is about*)
- ....

# Incentives for change

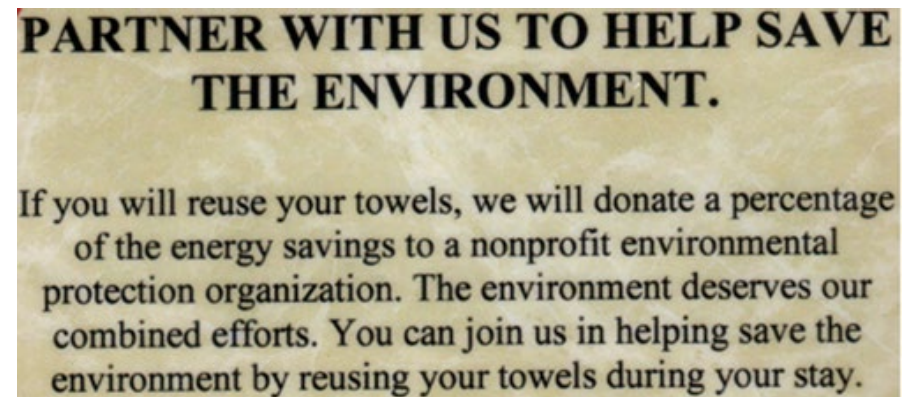
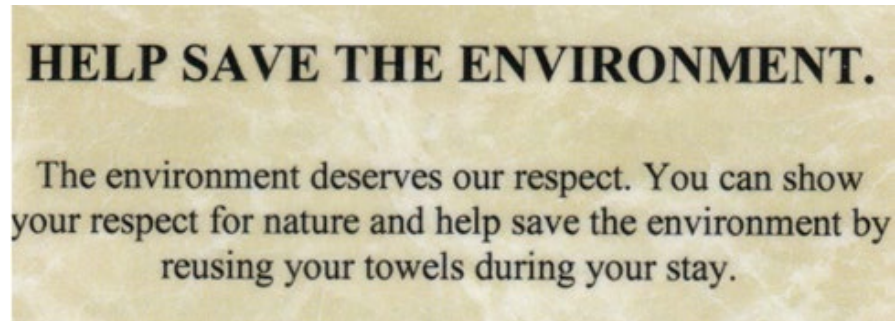
## What motivates us?

We tend to think that appeals to reason are most effective:

- Saving money
- Appealing to environmental protection
- Appealing to social responsibility
- ....

*Practical example:*

*Hotel guests are asked to use their towels more than once.*



# What is the most effective motivation?

A crucial motivator is the effect of social influence – our longing for **consensual behaviour** – i. e. following role models:

- People tend to follow the example of other people, especially if they identify with them
- People follow those who are many
- People follow those who are similar

This fundamental principle of social science can best be utilised for change management

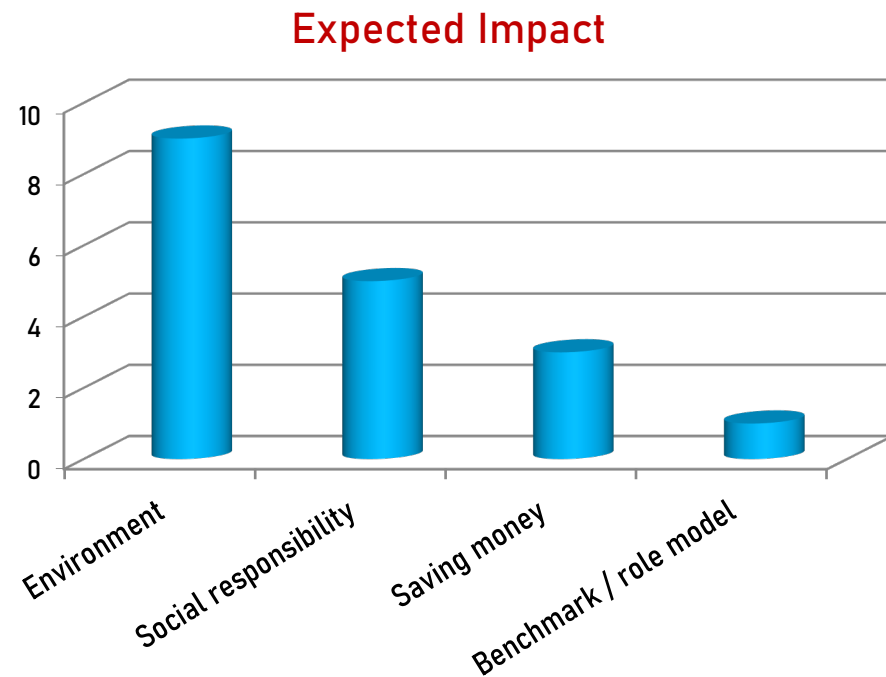
*It was proven that appealing to the social consensus is by far the strongest motivator:*

**JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT.**

Almost 75% of guests who are asked to participate in our new resource savings program do help by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay.

# The Power of Social Norms

The appeal giving the staff / the guests the opportunity to **consensual behaviour** or, in a further step, to be a **role model** („Tell others about how you act“) has proved to be much more relevant than, for example, the prospect of saving money:



# Orientation for one's own acting

**Social norms** give orientation, as we all tend to follow the example of others.

“Performing” those social norms is also helpful for orientation – e.g. sharing one's energy efficiency / climate protection targets by communicating efforts and achieved goals.

**Benchmarks** are important orientation aids towards these goals as they create a sense of scale – e.g. is my energy consumption in comparison low or high?

Benchmarks further create comparability...

- in relation to specific reference groups (neighbouring companies, sector comparisons ...)
- in relation to one's own energy consumption in the past and to the targets set

# Benchmarks: Reference values

## Hotels:

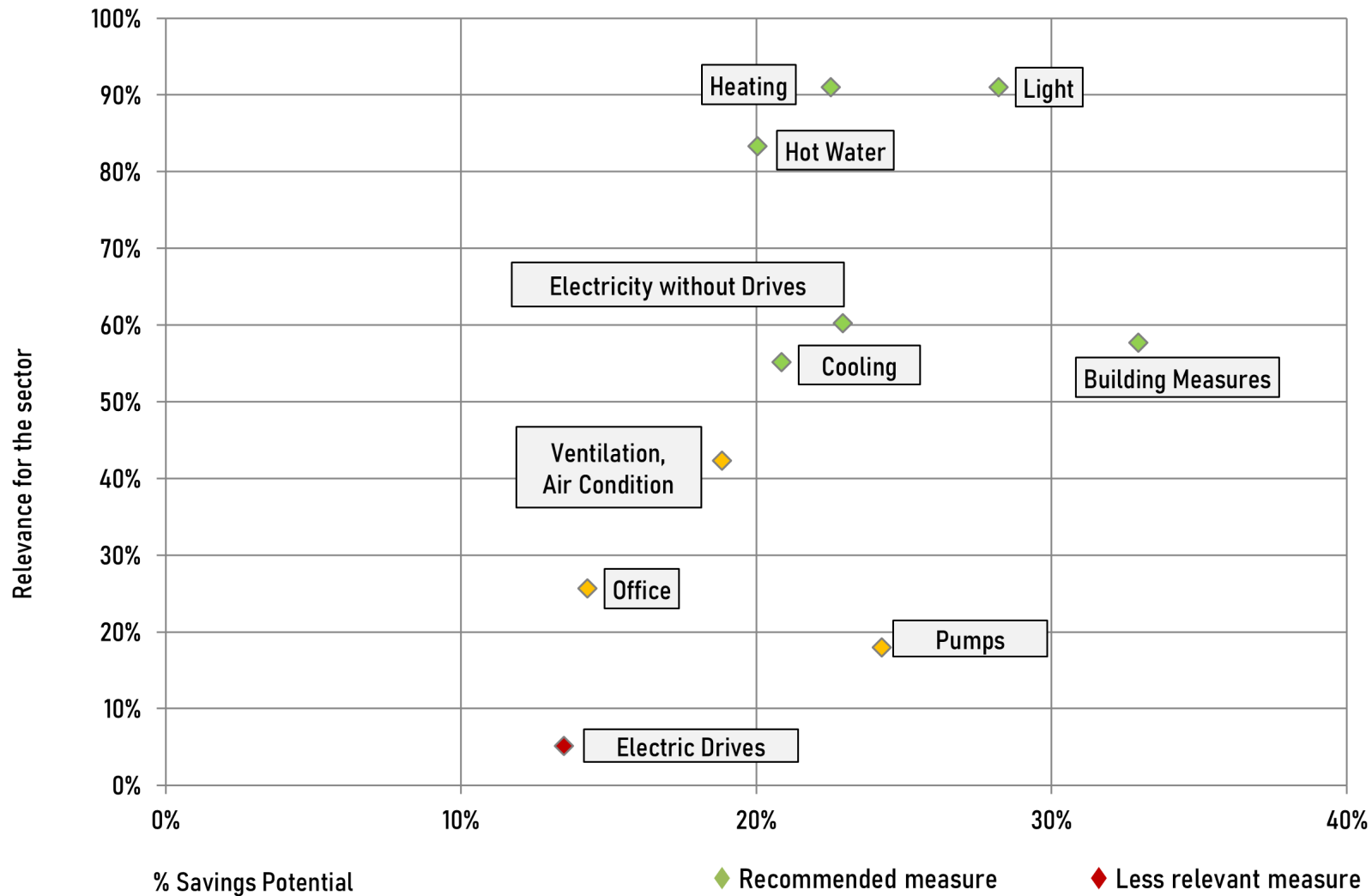
- Energy costs in percent of turnover
- Energy consumption per m<sup>2</sup> of conditioned area
- Energy consumption per employee
- Energy consumption per bed
- Energy consumption per meal
- Energy consumption per overnight stay
- ...

## Gastronomy:

- Energy costs in percent of turnover
- Energy consumption per m<sup>2</sup> of conditioned area
- Energy consumption per seat
- Energy consumption per employee
- Total energy consumption per meal
- Thermal energy consumption per meal
- Energy consumption per seat
- Electrical energy consumption per operating hour



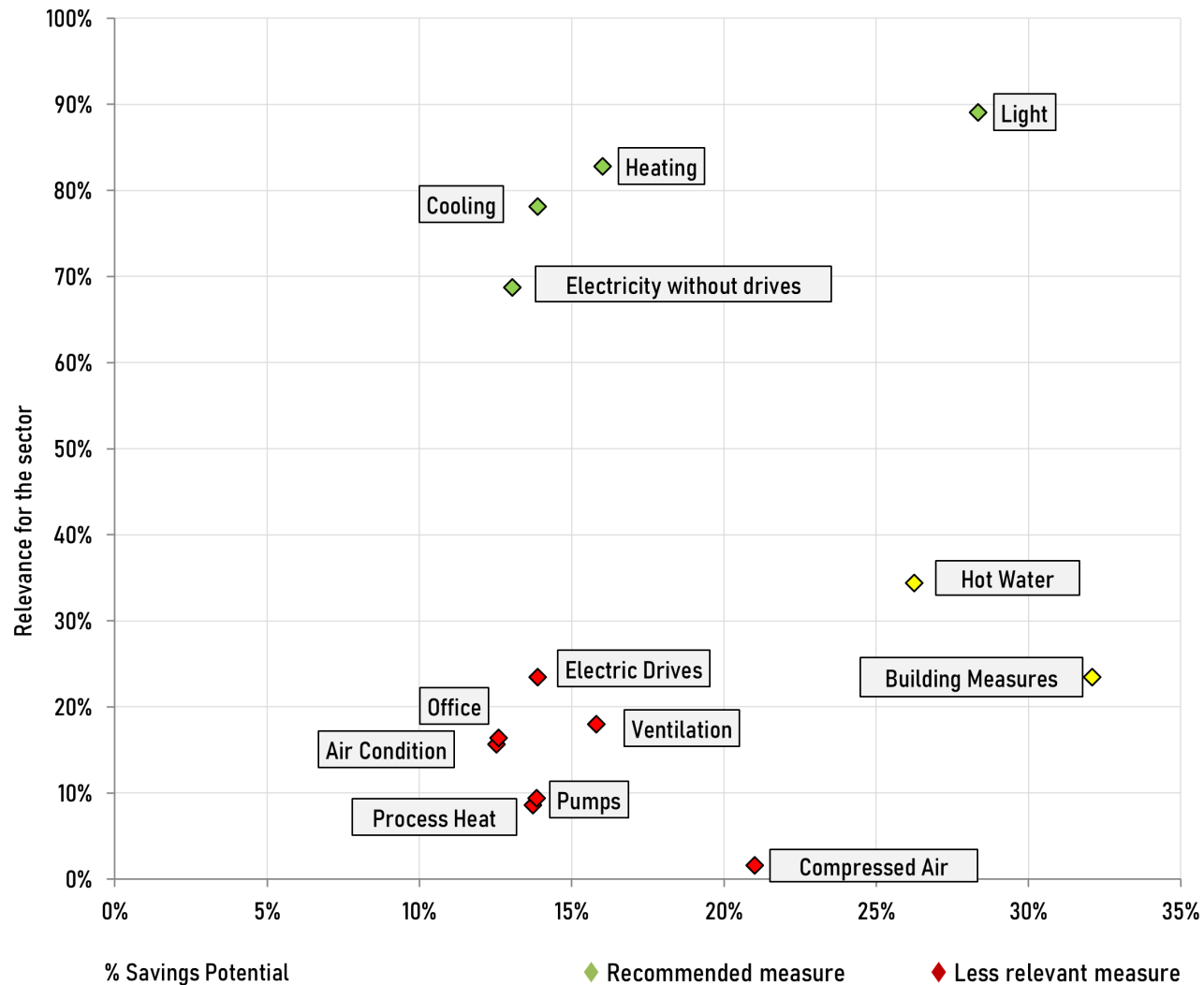
# Hotels: Proposed Energy Efficiency Measures



Average energy costs:  
5 % of revenue

*Background: As part of the Austrian Climate and Energy Fund's SME initiative, over 1,000 Austrian companies from more than 85 sectors have received energy advice to identify their consumption and possible energy savings. In 2012, EIW used these standardised energy analyses to determine the savings potential, CO<sub>2</sub> emissions and energy indicators of selected sectors – including gastronomy and accommodation.*

# Gastronomy: Proposed Energy Efficiency Measures



Average energy costs:  
4.1 % of revenue

# Low Hanging Fruits

Complex measures with a long amortisation period are no good introduction to energy efficiency, the financial and organisational demands overburdening many companies.

**Low hanging fruits** – simple energy efficiency measures that can be successfully implemented without (or with low) investment requirements – are a good starting point for establishing an energy-saving culture in the company.

- Lighting
- Adjustment of switch-on times and settings for consumers (lighting, heating, cooling, compressed air, etc.)
- Regular maintenance of equipment
- Passive cooling (shading, night ventilation, utilisation of natural cooling sources...)

# Best Practice: Numbers count, stories too

<p><b>Heating and Cooling Management: Hotel Prägant, Bad Kleinkirchheim</b></p> <p>By working with the Betterspace heating control tool, the room is pre-heated or cooled with a boost as required when the guest checks in. The temperature is automatically reduced when the guest is not in the room. The system works for air conditioning and heating systems and is managed via the cloud (external data storage connected to the internet). The first winter after the system was implemented in the old hotel building, it helped saving 35% of heating costs.</p>	<ul style="list-style-type: none"> <li>✓ heating</li> <li>✓ automation</li> </ul>
<p><b>Building Services Connected to PMS: Hotel Sans Souci, Vienna</b></p> <p>No external blinds for heat protection are permitted in the Hotel Sans Souci because of the ensemble protection. A connection between the property management system (PMS) and the building services control system regulates the temperature for vacant rooms, for checked-in rooms and for rooms with an active keycard reader, whereby the guest can vary the temperature by +/- 3 degrees.</p>	<ul style="list-style-type: none"> <li>✓ air conditioning</li> <li>✓ automation</li> </ul>
<p><b>Lower Electricity Costs with Photovoltaics: Hotel Tauernhof, Großarl</b></p> <p>As part of the refurbishment, a 98.8 kWp photovoltaic system was installed on the hotel roof, which produces around 10% of the hotel's electricity requirements. That led to a reduction in electricity costs by at least 40,000 euros.</p>	<ul style="list-style-type: none"> <li>✓ Photovoltaics</li> </ul>
<p><b>Geothermal Energy, Solar Energy and Splash Water Utilisation: Quellenhotel, Bad Waltersdorf</b></p> <p>Two photovoltaic systems (160 kWp and 130 kWp) can generate around 300,000 kWh of electricity per year. A heat pump utilises the residual heat from the thermal water (splash water) and produces around 800 kWh of heat which is used to heat the entire spa.</p>	<ul style="list-style-type: none"> <li>✓ photovoltaics</li> <li>✓ heat pump</li> <li>✓ water saving</li> </ul>
<p><b>Austria's First Zero-Emissions Hotel: Hi5-Hotel, Seiersberg</b></p> <p>The Hi5-Hotel is energy self-sufficient and independent of energy suppliers. Solar power and refined biogas are used in the catering kitchen. The energy from the kitchen waste heat is converted into electricity used for concrete core activation, which by cooling or heating creates an optimal climate for the 26 rooms. Components for a zero-emissions hotel: Combined heat and power unit / photovoltaic system / concrete core activation / quadruple-glazed windows.</p>	<ul style="list-style-type: none"> <li>✓ photovoltaics</li> <li>✓ biogas</li> <li>✓ building component activation</li> <li>✓ cogeneration unit</li> </ul>

# Thank You!

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