



Practical guide for pilot hotel owners

(WP5 – D5.8)

Issued by Sustainable Innovation, Created 30-Jan-16, Last update 08-Mar-16

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Co-funded by the Intelligent Energy Europe
Programme of the European Union



Contract N°: IEE/12/829/SI2.644758

THE EU INITIATIVE NEARLY ZERO ENERGY HOTELS (neZEH)

neZEH's scope is to accelerate the rate of refurbishment of existing hotels into Nearly Zero Energy Buildings (nZEB), providing technical advice to hoteliers for nZEB renovations, demonstrating the sustainability of such projects, challenging further large scale renovations through capacity building activities, showcasing best practices and promoting the front runners. The project covers seven (7) EU countries: Greece, Spain, Italy, Sweden, Romania, Croatia, France and has a wide EU level impact.

The expected results are:

- An integrated set of decision support tools to assist hoteliers in identifying appropriate solutions and designing feasible and sustainable nZEB projects;
- A dynamic communication channel between the building sector and the hotels industry, which will enable the exchanging between demand and supply side and the endorsement of the nZEB concept;
- Demonstration pilot projects in 7 countries to act as "living" examples; aiming to increase the rate of nZE renovation projects in the participating countries
- Practical training, informational materials and capacity building activities to support nationally the implementation and uptake of nZEB projects;
- Integrated communication campaigns to increase awareness for the nZEB benefits, to promote front runners and to foster replication; challenging much more SMEs to invest in refurbishment projects in order to achieve nZE levels.

In the long term, the project will assist the European hospitality sector to reduce operational costs, to improve their image and products and thus to enhance their competitiveness; contributing in parallel to the EU efforts for the reduction of GHGs.

neZEH started at May 2013 and will end at April 2016 and is co-financed by the Intelligent Energy - Europe (IEE) programme.

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Network of European Regions for a Sustainable and Competitive Tourism (NECSTouR)	EU
Federation of European Heating, Ventilation and Air-conditioning Associations (REHVA)	EU
Agency of Braşov for Energy Management and Environment Protection (ABMEE)	Romania
Creara Consultores S.L. (CREARA)	Spain
ENERGIES 2050 (ENERGIES 2050)	France
Energy Institute Hrvoje Požar (EIHP)	Croatia
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1.INTRODUCTION

The tourism sector is a significant contributor to worldwide greenhouse gas (GHG) emissions (5% of global CO₂ emissions: transport, energy and resource consumption in hotels, etc.), and accommodation specifically represents 1% of global CO₂ emissions (or 21% of the total tourism sector carbon footprint). Ironically, the tourism sector is, and will be, strongly impacted by the consequences of climate change (rising sea levels, extreme weather events, etc.). The tourism sector has major role to play in both mitigation and adaptation to climate change.

“One of the world’s largest economic sectors, tourism is especially well-placed to promote environmental sustainability, green growth and our struggle against climate change through its relationship with energy.”

Ban KI-MOON, Secretary-general of the United Nations - World Tourism Day 2014

These guidelines are to help pilot hotel owners get the most out of their investment by providing additional motivation and practical support to continue and conclude the refurbishment work; by raising awareness among all hotel staff, guests and general public; by identifying and reinforcing marketing opportunities; by building a communication strategy to present the rigorous energy policy adopted and its environmental benefits.

As a neZEH pilot hotel, you are in the process of implementing large-scale refurbishments to reach nearly zero energy building status (nZEB). As well as economic savings, there are other positive impacts, i.e. environmental preservation (mitigation of climate change) and guest comfort.



2. SEVEN STEPS TO ENERGY MANAGEMENT

2.1. STEP 1: COMMIT TOWARD CONTINUOUS IMPROVEMENT

To obtain financial returns from investments in improved energy management towards neZEH status, you need to strive continuously to improve your energy performance. Success is based on assessing energy performance regularly and implementing actions to increase energy efficiency.

Strengthen your commitment towards neZEH status and allocate staff and funding to achieve continuous improvement.

Form a dedicated team in charge of monitoring consumption, implementing procedures and gathering information to evaluate progress towards goals.

- Decide who will take responsibility for the coordination of the overall energy program.
- Appoint an energy team (one person for each operational area that significantly affects energy use) to collect data and ensure integration of procedures.

Formalize your commitment to energy efficiency through an energy policy

- State objectives and goals.
- Establish accountability.
- Ensure continuous improvement.
- Promote goals within the hotels and externally.



2.2. STEP 2: ASSESS ENERGY CONSUMPTION

Data Collection - Gather and track data about energy usage and document data over time (most information should be available on your energy bills). Apply sub-metering to identify items of high energy consumption and a potential for further savings. Consider also collecting feedback from guests about the thermal comfort in rooms, hot water and their overall satisfaction of their stay; this will be important information to identify areas of improvement.

Create Baselines and Benchmarks to determine the starting point from which to measure progress. Defining these will ensure adequate benchmark performance over the years.

Benchmark - Compare the energy performance of your hotel over time and with other similar hotels, if possible. Prioritize areas to focus on for improvements.

Analysis and Evaluation - Analyse your energy usage patterns and trends. Obtain your energy consumption data and carbon footprint.

Technical assessment - Evaluate the operating performance of facility systems and equipment to determine improvement potential. Get access to energy efficiency and renewable energy technology solutions tailored to your needs.

Financial assessment – Follow up on the return on investment (ROI) calculations of selected technological solutions from the energy audit.

2.3. STEP 3: SET GOALS

Set energy performance goals to drive energy management activities forward towards neZEH status based on the energy audit results and the financial analysis in the feasibility study report. Determine the scope and identify organizational and time parameters for your goals.

Estimate potential for improvement by reviewing baselines and by benchmarking to determine the potential and order of energy measures taken:

- Establish and express clear measurable goals with target dates.
- For improvements involving technological solutions, refer to the recommendations from the energy audit, feasibility study and the proposed rollout plan.
- Use the checklist below for easily implemented energy saving improvements and that do not necessarily incur additional costs.

CHECK LIST	ACTION LIST	RESPONSIBLE STAFF
HEATING, VENTILATION AND AIR CONDITIONING (HVAC)		
OPERATION		
Check temperature and humidity levels in various areas:	<ul style="list-style-type: none"> - Monitor outside air use. - Avoid heating and cooling at the same time. - Use modular, localized heating/cooling units where possible. - Control system by time-of-use when possible for public areas. - Use ceiling fans to increase comfort. - Shut off chiller during winter if possible. - Energy saving systems, i.e. heat pumps, can be installed for heat recovery and utilization of waste heat. 	
- Guest rooms		
- Meeting rooms		
- Dining rooms		
- Corridors		
- Lobby		
MAINTENANCE		
Check ductwork and Airflow	<ul style="list-style-type: none"> - Seal ductwork leaks- Clean filters and allow free air-flow to grills. - Seal unused building openings. - Install vinyl curtains in loading areas. 	
Check condition of windows and doors	<ul style="list-style-type: none"> - Weather-strip doors and windows, caulk cracks. - Insulate: doors, pipes, ductwork. 	
Check refrigerant levels	<ul style="list-style-type: none"> - Cover and lock thermostats and ventilation controls in public areas to prevent unauthorized adjustments. - Clean boilers, chillers and condenser coils regularly, straighten fans. 	
PROCEDURES		
Check thermostat Readings	<ul style="list-style-type: none"> - Do not heat/cool in low traffic areas, hallways or unoccupied rooms/floors. - Adjust building temperature by season: lower in winter / higher in summer. 	
Check availability of passive solar	<ul style="list-style-type: none"> - Advise employees to dress appropriately for seasonally maintained building temperature. - Utilize available passive solar heat during cooler months by opening blinds and drapes. 	

- Close doors to outside and unheated or un-cooled areas.
- Use ventilation only when required; use natural ventilation where possible.
- Establish routine maintenance procedures
- Plan occupancy so guests are assigned in same area of hotel.
- Have housekeeping close draperies and adjust thermostat to acceptable level in unoccupied area or rooms.

CHECK LIST	ACTION LIST	RESPONSIBLE STAFF
LIGHTING		
OPERATION		
Check when lights are being used.	<ul style="list-style-type: none"> - Use automated lighting Controls: <ul style="list-style-type: none"> • Photocells: All-night outdoor lighting • Timers: Parking lots, Restricted-access areas • Motion sensors: Low-traffic areas • Dimmers: Auditoriums, Meeting rooms - De-energize fixtures/ballasts not in use. 	
Check lighting levels.	<ul style="list-style-type: none"> - Reduce lighting to minimum acceptable level for safety/security in parking areas, storage areas, corridors. - Remove any excess lamps that are not needed to maintain desired lighting levels. - Do not install lamps near windows. - Consider painting walls with light colours that have the ability to reflect light in the room and increase luminosity level, compared to dark colours. 	
MAINTENANCE		
Check cleanliness and condition of lamps and fixtures	<ul style="list-style-type: none"> - Clean lamps for maximum illumination. - Repair broken fixtures. - Replace non-working lamps/bulbs. - Install lowest acceptable wattage bulb. 	
Check accessibility of switches	<ul style="list-style-type: none"> - Install energy-efficient ballasts. - Add reflectors to existing lighting. 	

- Label panels and switches so lighting can be monitored and controls can be accessed.

PROCEDURES

Check how lights are being used

- Turn off lights not being used.
- Use task lighting in place of area lighting where possible.
- Use natural light where possible.
- Buy recycled and recyclable equipment.
- Buy energy efficient equipment.

CHECK LIST

ACTION LIST

RESPONSIBLE STAFF

SERVICES / AMENITIES

OPERATION

Check equipment operating times

Check temperature settings.

- Use timers on bathroom heat lamps.
- Connect bathroom exhaust fans to light switches.
- Automate pool/spa heaters.
- Close outdoor pool/spa during cooler months.
- Set swimming pool heater to 22°C.
- Limit operation of food warmers/equipment.
- Preheat ovens, grills, broilers only when needed.
- Reduce temp on fryer/grill during slow hours.
- Direct cooling fans towards workers.
- Stagger turn-on times for equipment.
- Reduce domestic hot water temperature.
- Set water thermostat to minimum acceptable sanitation level.

MAINTENANCE

Check equipment condition and cleanliness

- Clean and polish heat reflectors.
- Clean burners and check regularly.
- Recalibrate broiler thermostats.
- Insulate water heaters and pipes.
- Install flow restrictors.
- Clean pool skimmer, strainer, basket, filter.

- Keep pool area clean; trim back foliage.

PROCEDURES

Check how equipment
is being used

- Instruct housekeeping to turn-off TVs/radios and close drapes in unoccupied rooms.
- Wash and dry laundry during off peak hours.
- Close door to keep conditioned air out of laundry.
- Cook during off-peak periods if possible.
- Cook food in large volumes, close together.
- Minimize use of range tops, griddles and broilers by using ovens, steamers, fryers and microwave.
- Load and unload ovens quickly to avoid heat loss.
- Use right-sized flat-bottom pans with tight lids.
- Shut off exhaust hoods when leaving
- Launder full loads; use cold water if possible.
- Run dishwasher with full loads use chemical rinse instead of hot water for sanitation.

CHECK LIST

ACTION LIST

RESPONSIBLE STAFF

MISCELLANEOUS

OPERATION

Check equipment
operating times and
location

- Locate refrigerator away from cooking equipment.
- Use booster heater in dishwashers to achieve hot rinse temperature required for Sanitation.

Check equipment
settings.

- Avoid refrigerator temperature settings lower than necessary.
- Locate refrigerator condenser coils in cooler place.

Check motor operation
for efficiency and use
patterns.

- Check if there is any water leakage and use flow restrictors.
- Use timers or other devices for elevator motor start/stop.
- Use automatic temporary elevator shut-off for low-use periods.

MAINTENANCE

Check equipment condition and cleanliness.

- Clean refrigerator coils, replace worn seals, defrost regularly.
- Maintain proper refrigerant charge in refrigerator systems and ice machines.

PROCEDURES

Check how equipment is being used.

- Refrigerate items only when necessary: do not overload units

Check the kind of equipment being purchased

- Label items so they are easy to find in refrigerator or cooler.
- Cool hot items on counter before refrigerating.
- Thaw frozen items in refrigerator.

Check staff and guests understand your approach and support its specifications

- Develop green purchasing.
- Train new staff about energy savings to achieve nearly zero energy status and encourage them to share their knowledge with guests.

* adapted from Hotel Energy Solutions (HES)

2.4. STEP 4: CREATE AN ACTION PLAN

With goals in place, the next step is to create a roadmap to improve energy performance. Prepare a detailed action plan ensuring a systematic process to implement energy performance measures.

The action plan should be updated regularly, usually annually to reflect recent achievements, changes in performance, and shifting priorities.

Define technical steps and targets:

- Identify gaps between current performance and goals
- Identify the steps necessary for upgrading and moving facilities from current performance to the desired level of performance as defined by the goals
- Define performance target, set timelines and establish a tracking system.

Determine roles and resources:

- Who should be involved and what their responsibilities will be
- Extent to which contractors will be used and what standards will be used to evaluate bids.

Incorporate these metrics into contractor agreements

- Financial resources needed to be secured.



2.5. STEP 5: IMPLEMENT ACTION PLAN

As you are involving staff and external stakeholders, ensure the support and cooperation of key people:

- Raise awareness - Build support all levels of your organization for energy management initiatives and goals.
- Build capacity - Through training, access to information and transfer of successful practices, procedures, and technologies, you can expand the capability of your staff.
- Motivate - Create incentives that encourage staff to improve energy performance to achieve goals.
- Track and monitor - Using the tracking system developed as part of the action plan to track and monitor progress regularly.

2.6. STEP 6: EVALUATE PROGRESS

1. Evaluate results and information gathered during the formal review process to create new action plans, identify best practices, and set new performance goals:

- Measure results - Gather tracking data.
- Review energy use and cost data (capital and operating expenses).
- Organize reports and data from tracking and monitoring efforts.
- Analyze energy efficiency achievements based on your established performance benchmarks.
- Compare energy performance to baselines.
- Compare performance against established goals for environmental performance and financial savings.
- Compare energy performance to peers and competitors to establish a relative understanding of where your performance ranks.

2. Review action plan to understand factors affecting the results as well as the additional benefits of improved energy performance. Check the effectiveness of your action plan. Share best practices throughout your hotel with staff and even guests where activities were successful. Where goals were not met, determine causes and decide actions to be taken. Key steps in reviewing the action plan include:

- Get feedback and ideas about the plan from the energy team, implementation staff, and other departments or external advisors.
- Gauge changes in employee and organizational awareness about energy issues.

2.7. STEP 7: RECOGNISE ACHIEVEMENTS

Provide internal recognition for the efforts and achievement of individuals, teams, and facilities. Seek external recognition from government agencies, media, or third party organizations.

3. MARKET YOUR INVESTMENT

Reaching an nZEB status is a challenging target for the neZEH pilot hotels but represents a great competitive opportunity to reduce operational costs, to improve guest comfort and to attract the “green tourism” market.

This section helps pilot hotel owners identify marketing opportunities, build a communication strategy to present the rigorous energy policy adopted and its environmental benefits, and to raise awareness among guests and the general public.

It can be difficult for guests to understand the hotel’s achievements in saving energy, improving energy systems and environmental effort in the broader sense. Hotel certifications, awards and eco-labels can be complicated to understand and, partly due to their proliferation, can be largely ignored by consumers.

For this reason, your hotel should have a clear communication strategy to inform guests about the hotel’s ambition to achieve nearly zero energy status and the measures taken to achieve this.

3.1. A SIX-POINT COMMUNICATION STRATEGY FOR HOTEL OWNERS:

1. Communicate why the hotel is implementing energy-saving measures and renewable energy technologies.
2. Explain why the hotel encourages guests to take part in energy-saving measures and how this fits into the context of nearly zero energy status.
3. Explain the importance of conserving natural resources, and how the hotel supports this.
4. Train all staff categories on how to communicate the hotel’s efforts in energy efficiency and sustainability to guests.
5. Inform guests about the hotels ambitions to accomplish nearly zero energy status, with particular focus on measures that are tangible and obvious to guests, i.e. solar panels, motion sensor lighting, electric bikes, free charging for electric cars, etc.
6. Include this information in the hotel’s literature; through notices in the rooms, communicate their impact on climate change, how they benefit guests and how guests can support this effort.

Marketing the hotel’s energy improvements can help you gain additional exposure in the media. Many media outlets are keen to know about innovative companies and increasingly look for stories related to the environment and sustainability. Enhancing environmental performance towards nearly zero energy status by implementing EE/RES measures are ways of distinguishing a hotel and attracting new guest segments. Forward-thinking hotel managers use this distinction as a competitive advantage to raise awareness and increase revenues. It will generate positive

publicity that engages both new and existing customer segments.

However, a word of warning: Do not to start a vigorous “environmental” marketing campaign until you have made tangible progress and can demonstrate results. Otherwise, you run the risk of losing credibility with guests who are savvy enough to identify “empty” marketing campaigns.

3.2. GUEST PROFILING

Initially, and as part of the hotels marketing strategy, define your guest profiles:

1. Country/town of residence: depending on the origin of the guest (local, national, European, International), sensitivity to communication may change. For example, guests from Nordic European countries may be more sensitive to the environmental engagement of the hotel. Local clients will be more easily reached with local communication tools and channels.
2. Purpose of travel (leisure, business): this will affect factors like the number of days of the stay and how concerned the guest will be by the hotel’s “other benefits”, and not just price and comfort.
3. Age: the approach used will likely change according to the age of the public to be reached. For example, young guests may interact more via social media and could be more vulnerable in terms of budget, while adult guests may be more influenced by specialized media, like travel magazines.
4. Type (single adult, groups, families, special needs): beyond budget, it is important to know what services and activities guests require, what added value the hotel could offer them, and how the hotel’s engagement in the neZEH project will impact their choices.

3.3. COMMUNICATION TOOLS AND CHANNELS

Listing the current communication tools and channels used by your hotel will help to define adaptations that can be made in order to integrate the neZEH approach into your marketing strategy. Also, it will assist you to assess the respective impact of each tool and channel.

During this phase it is important also to identify which tools and activities are the most efficient, in order to adapt and prioritise. The list below presents several of the main communication tools that hotels may have:

1. Printed material (brochures, leaflets, posters, etc.): these tools are either used on-site (within the premises of the hotel) or off-site (tourism offices, airport, car-rentals, etc.)
2. Website of the hotel
3. Social media (Facebook, Instagram, Twitter, LinkedIn, etc...)
4. Smart phone applications (reservation apps, like TripAdvisor, booking.com, Green Globe etc.)
5. Newsletters
6. Film clips/videos of hotel (YouTube).

3.4. IDEAS TO ADAPT HOTELS COMMUNICATION TOOLS

- Include information on the hotel's environmental/energy engagement in the hotel's leaflet/brochure. The leaflet containing a brief description of the hotel's energy approach, the works of refurbishment, the energy savings and how it benefits and impacts both on guests and on the environment represents a simple way to communicate to clients who stay at the hotel.
- Make available the dedicated leaflet for guests providing information about how the hotel became a "nearly zero energy building" (nZEB) and the investment in technology made giving them an idea of the approach and the added value of the establishment.
- Add a new tab "environment" or "responsible practices" or "energy efficiency" in the hotel's website. This is a good way to show to customers and the general public how committed is the hotel in offering an efficient and comfortable service while concerned by climate, energy and environment.
- Provide numbers and pictures of what has been done during the retrofitting works to encourage potential clients when choosing your hotel for their accommodation but also other hoteliers to commit themselves to the same approach.
- Make available documents presenting the Hotel's engagement on the website that can be downloaded by guests. For example, on its website, the Boutiquehotel Stadthalle in Vienna has added documents presenting some of the actions implemented to be sustainable:
https://www.hotelstadthalle.at/wp-content/uploads/2015/02/Factsheet_2012_Englisch.pdf
- Use social media such as Facebook, Twitter, Instagram etc. They exert a significant impact in society's choices and lifestyle. Creating a profile on these new and fast ways of communication allows the hotel to reach a wide range of the public, especially the trendy ones interacting with them instantly through pictures, events, and links to more detailed contents.
- The neZEH pilot hotels have the possibility to use the already existing hashtag for neZEH in twitter, #neZEH.
- Implement dedicated on-site communication actions. This is an effective way for the guest to feel that they are staying in a truly engaged hotel. The guest is made to feel part of the approach by inviting them to participate (by behaviour and choices through being informed). It is beneficial to raising awareness among guests, encouraging them to support the hotel environmental - energy approach and even invite them to apply it when they get back home.

The following tools and activities presented below are suggestions of what can be implemented:

- Signs on the walls - Adding signs on the walls, and in different relevant places in the hotel, is a good way to show each of the actions that have been undertaken by the hotel. Signs should be formulated as an "invitation" to participate, rather than in a sanctimonious manner, such as "Please turn off the lights when you leave your room."

- Display the hotel's energy/environmental/sustainability policy. The Green Hotel and Responsible Tourism Initiative proposes an easy-to-use tool to create the Hotel's policy:

<http://green.hotelscombined.com/ReviewYourHotel.php>

- Use the architecture/engineering as a marketing tool - The visual impact is one of the most important marketing tools. Making the hotel's approach immediately visible to customers through the building, furniture, external sources of renewable energy reinforces constantly the hotels commitment to the environmental and energy efficiency. (Examples: Decoration and solar panels at the BioVita Hotel, Italy – a "climate hotel"; green walls, solar panels and lavender roof on the Boutiquehotel Stadthalle in Vienna)

- Offer guided tours of the refurbishment works, the installed technologies, etc. to interested parties. Showing these actions can enable guests to better understand the hotel's approach as well as to consider doing the same at their homes. Specific leaflets explaining how it works can also be furnished during these tours.

- Provide information to the guests. Hotels can play an important role in raising the environmental awareness of clients and contribute to a general behavioural change. By providing information that helps guests apply eco-gestures and sustainable behaviour shows that the hotel has a true concern for the planet. The information can also relate to the destination: information about public transports, about local products shops, about "green" activities, etc. Information can also be dedicated to invite guests to apply eco-gestures at home.

3.5. MONITOR MARKETING EFFECTIVENESS

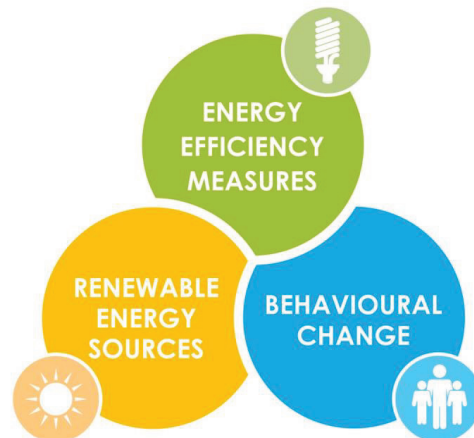
To keep the effectiveness of the marketing strategy assuring the quality of neZEH hotels' in terms of energy and environmental efficiency as well as of client service, it is very important to survey the implemented tools and activities. For example, this assessment can be done by:

1. Evaluate customer numbers before and after implementation of the new marketing strategy.
2. Customer feedback
 - a) Satisfaction appraisals at the end of their stay with questions about the quality of the service, of the bedroom, about the comfort, about the environment, activities and cost-benefit etc. Using a rate from "poor" to "excellent" or "0 to 5" will help both the guests in answering it easily, and also the hotel in collecting the necessary information. Afterwards, an open question can close the appraisal for those who want to be more precise about certain subjects.
 - b) Asking how they heard about the hotel: through social Media, magazine, booking website etc.
3. Budget how much has been invested in marketing and what revenue has been created by the new adapted marketing strategy
4. Update constantly the hotel's website and its social media accounts with news, events, promotions, etc. give more exposure to the hotel enabling customers to feel more connected to it. "Freshware is king!"

4. PROVIDE STAFF TRAINING

Behavioural change is the most cost-effective way to reduce energy consumption, and it is essential for implementing a successful energy efficiency or renewable energy project. Raising environmental awareness among all staff categories is key in achieving energy savings and carbon emissions reduction goals.

Staff participation in the hotel's energy action plan is not only essential for the energy efficiency policy to be successful, it is also an effective way to inspire employees and give new meaning to the business! When staff members understand that energy efficiency is part of the hotel's environmental strategy, they will be able to contribute to the hotel's efforts to become a more sustainable business.



Staff information and training is a highly efficient and effective measure for improving the way energy is used in a hotel. Although it may require some time and money to inform and train the staff, the resulting benefits will become apparent in a very short time because staff behaviour has a direct impact on energy consumption.

Provide annual training about the energy status of the hotel and on the actions that employees can take in order to involve them actively. Invite staff to provide energy saving feedback and ideas regularly as continuous improvement is an important part of the hotels action plan.

Behavioural change does not imply reduction in comfort and does not mean setting restrictions. It is about improving the way energy is used, and avoiding unnecessary energy consumption. One option is to design incentives that will motivate the staff to make efforts and be more careful about energy (and water) consumption.

4.1. PRACTICAL TIPS FOR STAFF

Engaging staff actively during the hotel's operation and maintenance is needed to get the most out of your energy efficiency investments. A booklet has been produced with practical tips for different staff categories to use easily when carrying out daily activities. Simply put, how best to carry out their daily activities and assist in maintaining low energy consumption levels – “thinking nearly zero energy” in everyday working life.

The booklet encourages your staff to discuss energy saving tips with other staff and provide valuable feedback and ideas.

4.2. STUDY VISIT TO A “NEARLY ZERO ENERGY HOTEL”

Arrange a study visit to a high efficiency hotel, so that staff can experience first-hand measures taken in a hotel environment and exchange experiences with hotel management and staff.



Picture credits Boutiquehotel Stadthalle, Vienna

5. ENGAGE YOUR GUESTS

Ask guests to contribute actively during their stay, so that the hotel's energy efficiency policy can be fully successful and neZEH goals accomplished. Make them aware that the hotel cares for the environment and that sustainability is important. They will be pleased to learn that the hotel is committed to reducing its negative impact on the environment.

Make the hotels environmental policy easily accessible to guests. Describe actions being taken to reduce the negative environmental impact and that will motivate guests. Beware not to be too technical. Explain that a reduction in energy consumption is a key element of the environmental policy.

Inform guests about simple actions they can take every day to limit energy waste and to improve the environmental-friendliness of their stay. The obvious place to do this is contextually in their room either as a leaflet or when using specific facilities (e.g. stickers on appliances or switches). Present information provided the hotels TV channel.

Here are nine simple actions guests can take to reduce their energy consumption:



Why aim for a nearly Zero Energy Status ?

Tourism & climate
The tourism sector is a significant contributor to worldwide greenhouse gas emissions (transport, energy and resource consumption in hotels, etc.), but is also strongly impacted by the effects of climate change (rising sea levels, extreme weather events, etc.). Nevertheless, the tourism sector holds many opportunities to contribute to climate change mitigation and adaptation.

Buildings & energy
Buildings represent about 40% of the energy consumption worldwide and around 36% of greenhouse gas emissions in Europe. It is widely recognized that buildings are closely linked to issues of climate change, both in terms of challenges and opportunities to explore.

Contributing to the EU objectives
The European Union calls on radical reduction of greenhouse gas emissions by 2050 (80%-95% compared to 1990 levels). nearly Zero Energy Buildings (nZEB) are at the forefront of EU policies to achieve 2050 targets. nearly Zero Energy Hotels contribute to demonstrating the profitability and sustainability of refurbishments towards the nZEB status.

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The hotel BEST WESTERN Ajaccio Amiraute is one of the first European Hotels engaged to becoming nearly Zero Energy.

Learn more about the neZEH European project:
www.nezeh.eu

On the road to becoming a nearly Zero Energy Hotel...

less energy consumption
less CO₂ emissions
better comfort for guests

neZEH is supported by the Intelligent Energy Europe (IEE) programme. The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the IEE nor European Commission are responsible for any use that may be made of the information contained therein.

Help us save electricity. Did you know that by avoiding waste of electricity you contribute to the preservation of our natural resources and landscapes?

1. Please turn off the air-conditioning when you leave your room
2. Please switch off all lights when you leave your room
3. Please avoid "sleep mode" for televisions

Help us save energy use for heating and cooling. Did you know that over half the energy consumed in the hotel is used for space heating and cooling and that much is often wasted?

4. Please close windows and doors when the heating/cooling system is on.
5. Please keep the room temperature reasonable (recommended indoor temperature setting for winter is 21°C and for summer 26°C).

Help us save water. Did you know that water is a precious resource for humanity and by using it sparingly you will contribute to its preservation?

6. Please consider taking a shower instead of a bath
7. Please do not leave water running continuously
8. Please inform cleaning staff you are willing to keep your towels for more than one day.
9. Please inform staff in case of water leaks.

6. SUGGESTED FURTHER READING

6.1. SUSTAINCO MATERIAL

Technical toolkit for retrofit

<http://www.sustainco.info/gb/toolkits/retrofit/>

Includes separate pdfs for various technologies and solutions for both domestic and non-domestic buildings. These pdfs explain each technology/solution and how it can be applied to the building.

6.2. ENTRANZE MATERIAL

Cost of energy efficiency measures in buildings refurbishment: a summary report on target countries, October 2013

https://ec.europa.eu/energy/sites/ener/files/documents/2014_report_2020-2030_eu_policy_framework.pdf

6.3. FURTHER SOURCES FOR ENERGY MANAGEMENT AND SUSTAINABILITY IN HOTELS

- Guidelines for Environmental Sustainability in Hotels.
www.tuitravelplc.com/system/files/susrep/TUITravelGuidelinesforEnvironmentalSustainabilityinHotels_0.pdf
- Scandic Hotels: Case Study in Sustainability:
<http://www.hospitalitynet.org/news/4064048.html>
- Hilton Worldwide “LightStay”:
www.hiltonworldwide.com/aboutus/sustainability.htm
- Marriott “Environment”:
www.marriott.com/corporate-social-responsibility/corporate-environmental-responsibility.mi
- Natural Resources Canada, Energy Innovators Initiative-Hospitality Sector, Saving Energy Dollars in Hotels, Motels and Restaurants, 2003,
<http://www.notlhydro.com/userfiles/file/Guides/Hospitality.pdf>
- International Tourism Partnership, Environmental Management for Hotels – The Industry Guide to Sustainable Operation, 2014,
<http://www.greenhotelier.org/wp-content/uploads/2014/06/2-Energy-for-web-1.2.pdf>
- Sustainable Energy Ireland, Managing energy – a strategic guide for hotels,
http://www.seai.ie/Archive1/Archived_SEAI_Documents/strategic_guide_for_Hotels.pdf

- Carbon Trust, Hospitality – Saving energy without compromising service, 2015,
https://www.carbontrust.com/media/39220/ctv013_hospitality.pdf
- Carbon Trust, Food preparation and catering-Increase carbon savings without compromising on quality, 2012,
https://www.carbontrust.com/media/138492/j7895_ctv066_food_prep_and_catering_03.pdf
- Thermie Programme, Energy Efficient Lighting in Hotels, 1995,
http://www.seai.ie/Publications/Your_Business_Publications/Technology_Guides/Energy%20Efficient%20Lighting%20in%20Hotels.pdf

6.4. neZEH PUBLICATIONS

http://www.nezeh.eu/main_menu/library/nezeh_reports/index.html

- D2.2 Showcasing material
- D2.4 List and classification of technologies and solutions
- D2.4c - Assessment of existing nZEB technologies
- D2.5 List of hotel categories
- D2.6 - Information papers on financial tools
- D6.1 Marketing Guidelines for neZEH pilot hotels

6.5. HOTEL ENERGY SOLUTIONS MATERIAL

<http://hotelenergysolutions.net/content/hotel-energy-solutions-publications-overview>

- Hotel Energy Solutions (2011), Energy Efficiency and Renewable Energy Applications in the Hotel Sector, Training manual 2011-Annex I and II
- Hotel Energy Solutions (2011), Hotel Energy Management Guidelines
- Hotel Energy Solutions (2011), Best Practices Guide: Successful Energy Efficiency Technologies Integration in SME Hotels
- Hotel Energy Solutions (2011), Factors and Initiatives Affecting Energy Efficiency use in the Hotel Industry
- Hotel Energy Solutions (2011), Key Energy Efficiency Technologies Database for SME
- Hotel Energy Solutions (2011), Key Energy Efficiency Solutions for SME Hotels
- Hotel Energy Solutions (2011), Best Practices Guide: Successful Renewable Energy Technologies Integration Case Studies in SME Hotels
- Hotel Energy Solutions (2011), Factors and Initiatives affecting Renewable Energy

Technologies use in the Hotel Industry

- Hotel Energy Solutions (2011), Key Renewable Energy (RE) Solutions for SME Hotels
- Hotel Energy Solutions (2011), Analysis on Energy Use by European Hotels: Online Survey and Desk Research

6.6. HOTEL ENERGY SOLUTIONS FACTSHEETS

- Energy efficiency
(<http://hes.unwto.org/sites/all/files/docpdf/keyeetdatabaseforsmehotelsaout-2-2.pdf>)
- Renewable energy
(<http://hes.unwto.org/sites/all/files/docpdf/keyrenewableenergyresolutionsforsmehotelspublication24aug2011.pdf>)

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Co-funded by the Intelligent Energy Europe
Programme of the European Union