

Developing Green Buildings: A project for Hotels in Barcelona



**We support Hotels so that they grow
ecologically intelligent**

The following pages will walk you through the results of one of our
green building projects for a Hotel in Barcelona, as
part of our Green Business consulting solutions

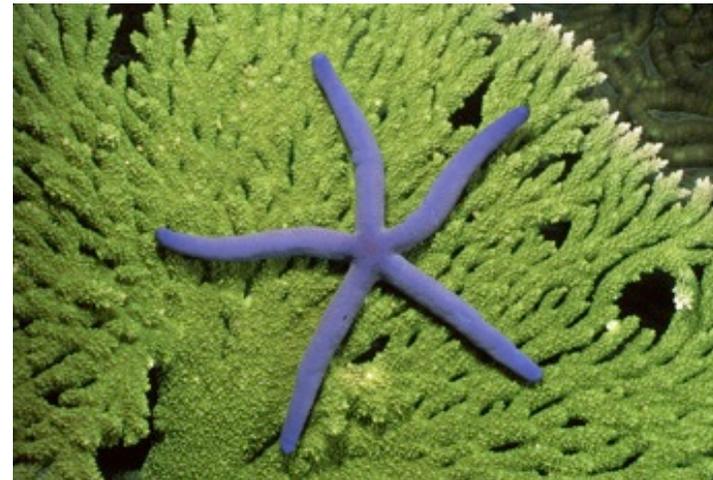
Green Business Consulting Solutions

Energy Management Audits

Project Management for
Green Company projects

Workshops and Art

Individual software



Hotels go green: Luxury or the right investment?

- **Sustainability means building a future worth living in**, respecting natural resources, and doing the right thing
- While doing the right thing, **you can also save money, and build a new image** attractive for new customers
- It is not a question of „cutting costs“ by „cutting value“: It is about doing things much better, investing with intelligence, and **offering a new quality of service which customers will value**
- It is the right time to act with a **new kind of innovation**. Do not leave this opportunity open for your competitors!

Our Services fit our Vision

At WeeDooCare we believe in building an **ecologically sound future**, and this is our value. We provide transparent information about your current energy consumption status, identify painpoints, offer optimization solutions, and give you the right tools to help you in the decision making process.

We offer a variety of services:

- Energy audits
- Energy efficiency improvement projects
- Tailor-made software applications to monitor, simulate, and manage your activities and plans
- Solution deployment and project management



What is an Energy Audit?

- We analyze your energy consumption data and extract several levels of information, including **new insights** hidden under the surface
- We elaborate a **neutral diagnosis of your current state** and offer an **energy consumption study** according to energy sources
- We audit energy consumption, waste generation, employees training, customer feedback, environmental certifications, etc.



What do we mean by neutral diagnosis?

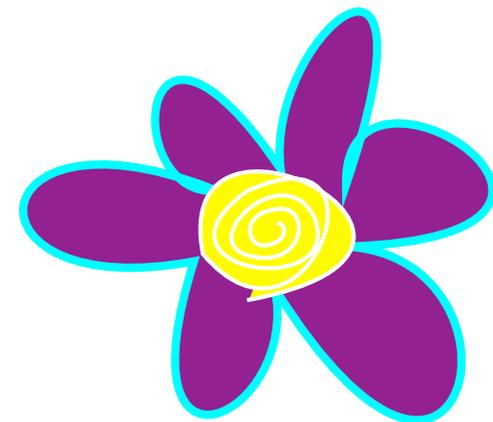
- Our business model is based on business consulting and not on implementation
- You choose **what, when and with whom** to implement the measures we propose if we identify gaps in your current state
- We believe in ethical and independent approaches. Our recommendations are like a *second opinion* by a medical doctor. Our deep interest is to give you the best diagnosis for you to decide and act.

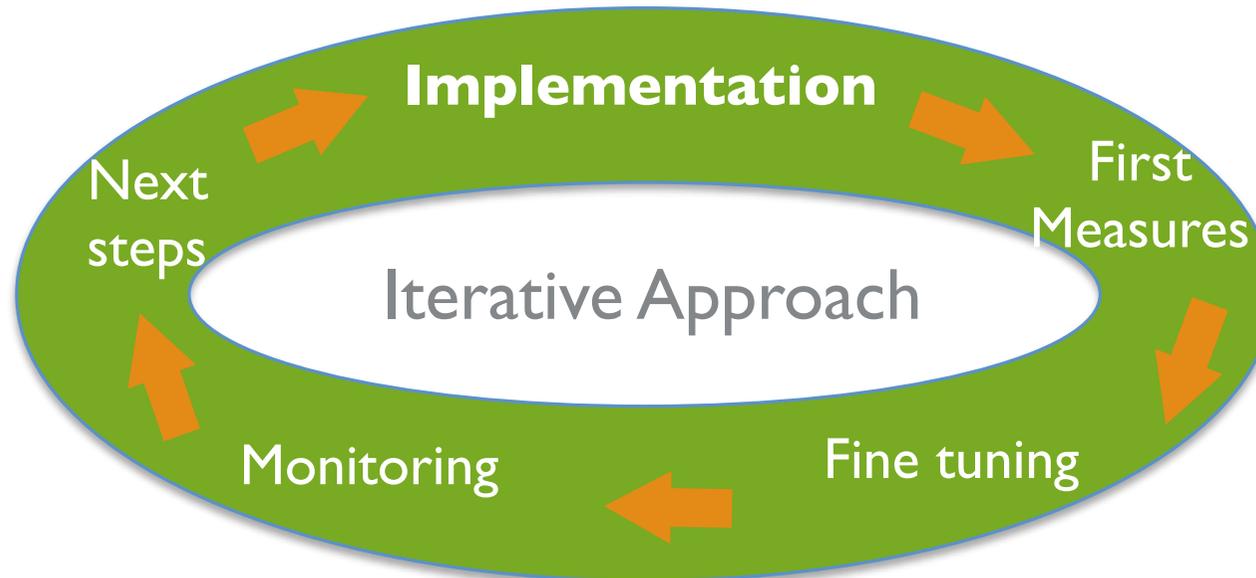


Improvement proposals: Facts & Human sense

- After the audit we propose a **set of measures** aimed at improving efficiency, creating cost reductions, and making your business more ecologically sustainable
- We use **mathematical optimization techniques** to find objective optimal solutions to complex problems, and combine analytical results with a lot of **human sense, and heart**
- The action points are determined case by case based on the needs of each client (measures around electricity consumption, waste management, employees training, marketing approaches, web positioning, monitoring software, etc.).

$$\hat{H} = \frac{\hat{p}^2}{2m} + V(x) = -\frac{\hbar^2}{2m} \frac{d^2}{dx^2} + V(x)$$





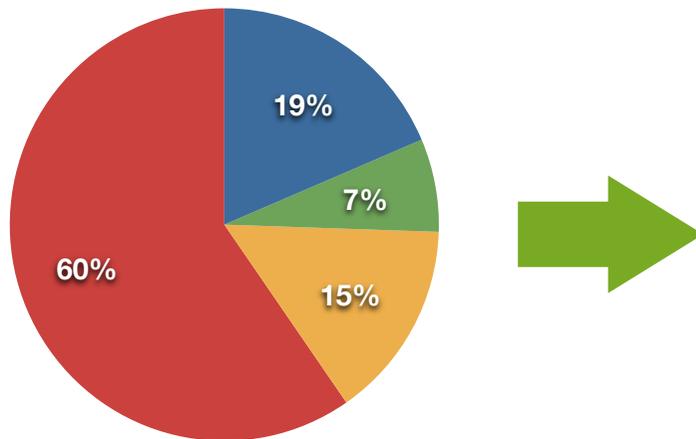
If you wish, we will be happy to offer mediation with local providers to implement the desired set of measures. Our software developers can create tailor-made software apps. We can start with an energy audit, and later on, according to your demand, manage your energy optimization project **end-to-end**.

We provide you with the right information, and tools: You decide.

A real example: The path to saving 60% electricity costs for lighting

Before: Current situation of a hostel in Barcelona:

Electricity consumption in 2012 over 700.000 kWh (100 k€)

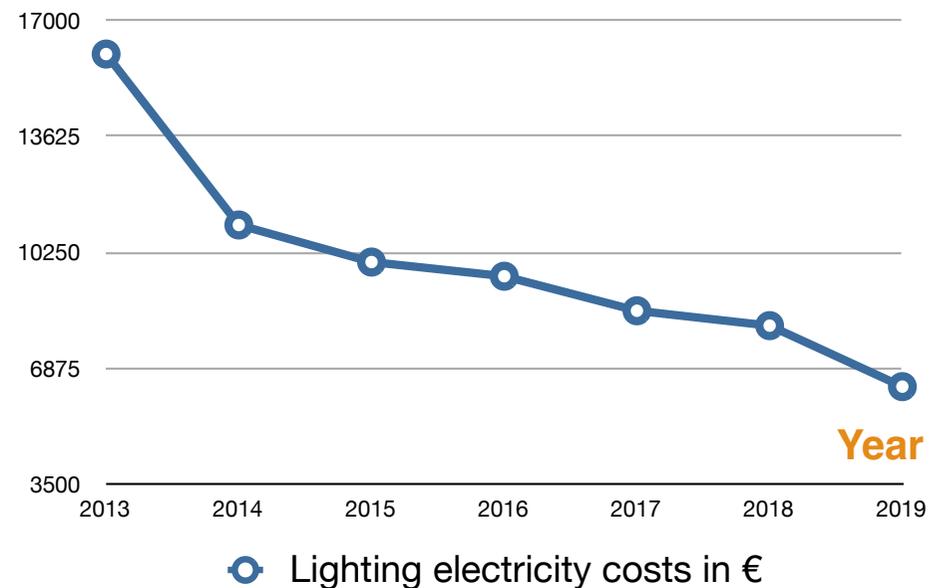


- Lighting
- Service equipment
- Floor appliances
- Air Conditioning & fan-coils

After: Implementation of lighting saving measures

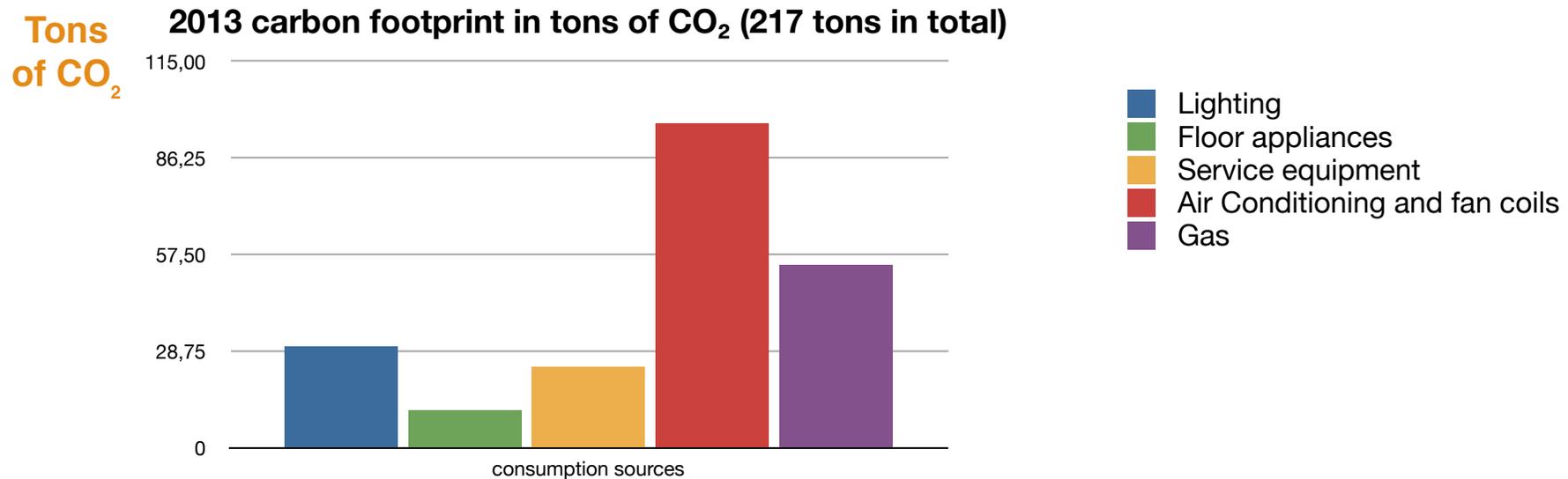
Costs in €

Lighting cost evolution in € with our LED measures



These savings are achieved with **zero initial investment** based on an intelligent replacement process

The hotel generates **217 tons of CO₂ per year** due to electricity and gas consumption. Reducing your carbon footprint has a **positive impact on the environment and also on your image**. Hotels all around the world have already started to act accordingly.

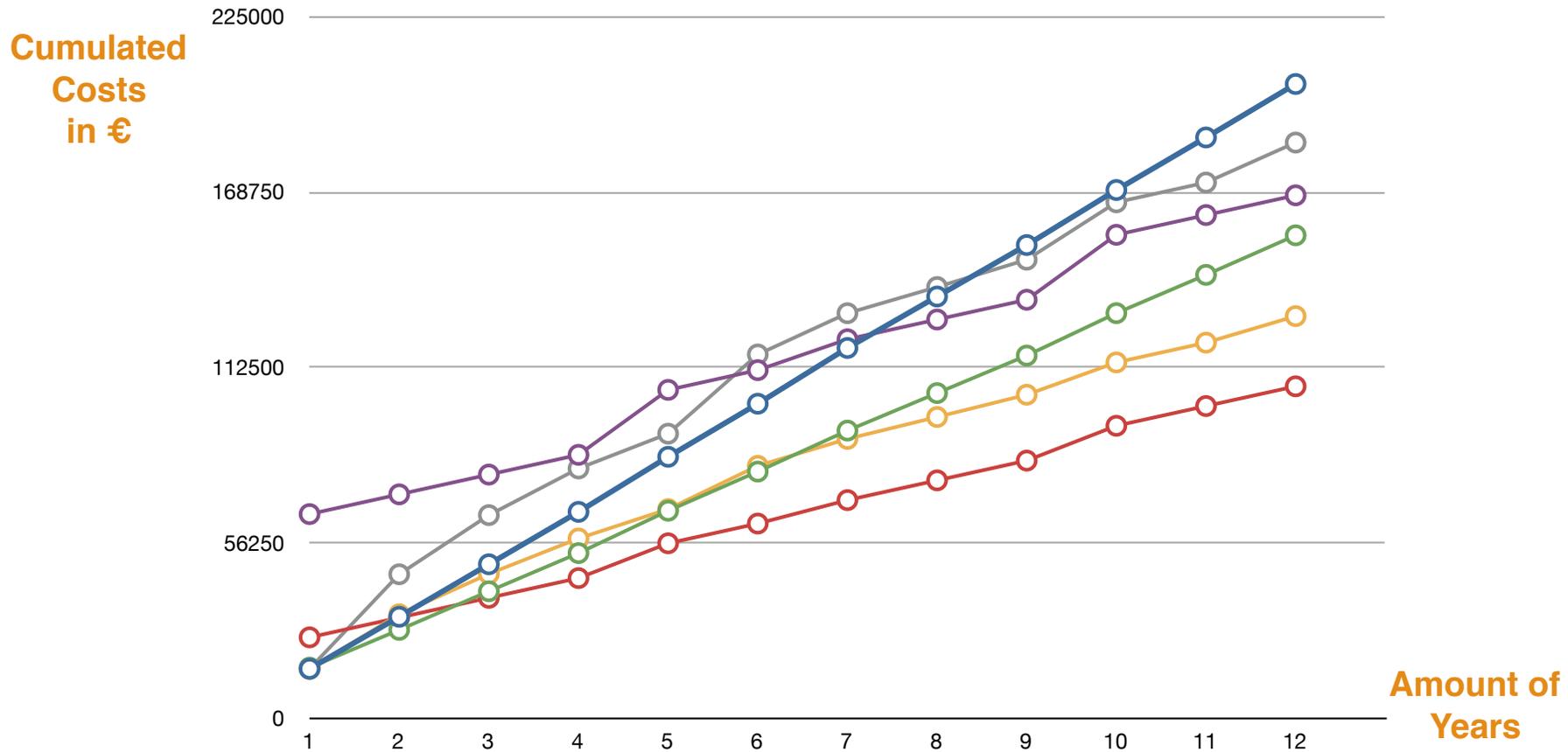


The current energy consumption is equivalent to:

155 x  traveling 20 km per day during a year or 83 x  with three members using AC and central heating

Comparing different optimization measures

Lighting electricity costs (incl. maintenance & replacements) in €, accumulated in a 12 years period

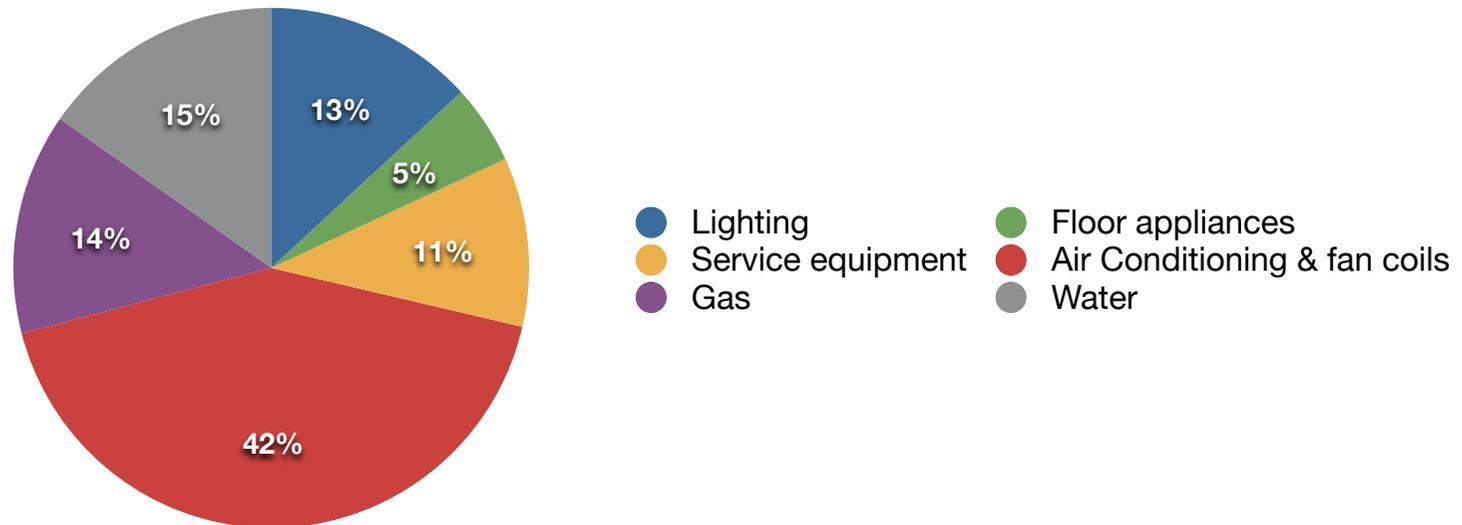


Different lighting replacement measures:

- No measure
- Measure 2
- Measure 4
- Measure 1
- Measure 3
- Measure 5

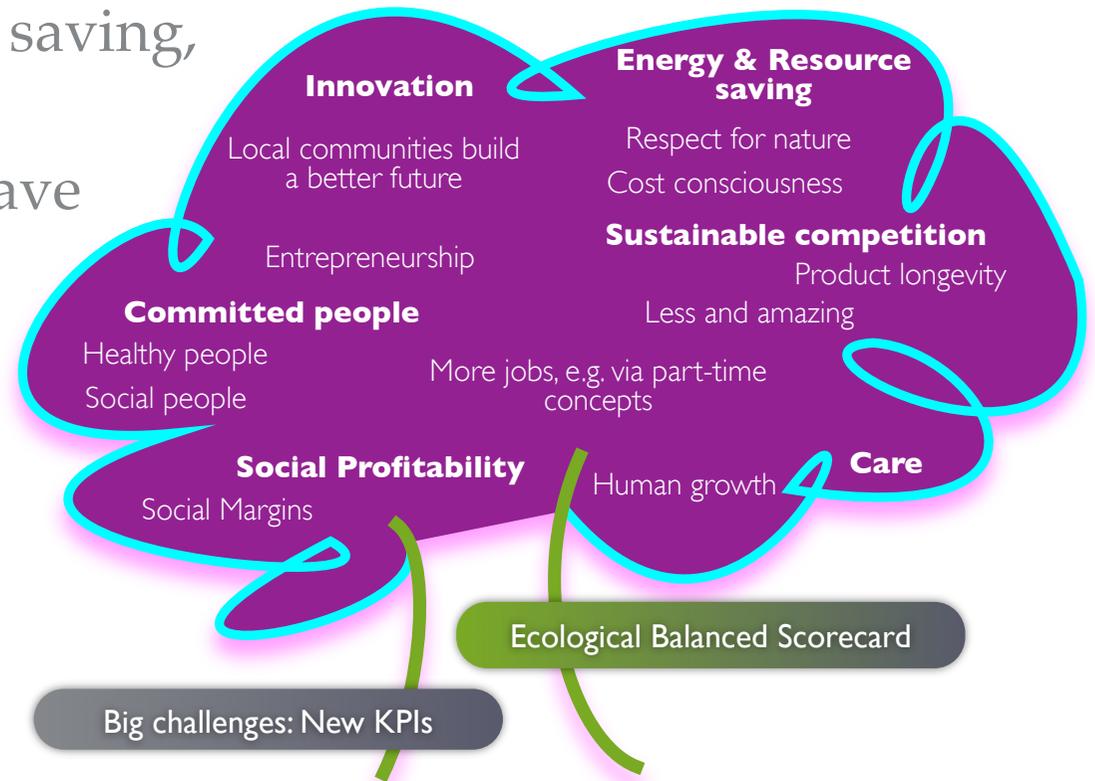
Air Conditioning and Central Heating Systems

Annual costs in € for the example hotel over 150 k€



- In general, the energy consumption (and costs thereof) of AC and heating is roughly 50% of the total in a hotel
- Due to this fact, any saving (even minor) in this part will translate into big absolute cost reductions
- A more rational usage and a better configuration of the system can achieve this purpose with minimal investment

At WeeDooCare we have a firm compromise with sustainability and energy saving, always from a neutral and independent standpoint. We have no permanent agreements with third parties. Our goal is to provide the best solutions available at each moment for the precise needs of our clients.



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