

Town Hall ‘Berg en Dal’, The Netherlands

Comfort Energy Optimizer - Saving energy, reducing CO₂ footprint

Saving energy in existing buildings is often far-reaching and expensive. The Comfort Energy Optimizer offers you the possibility to use much less energy without major modifications to your building or climate system. If you have renewable energy sources, the Comfort Energy Optimizer also uses them much more effectively. This leads to savings of 15 to 30% on your energy costs for the air-conditioning of your building. At the same time, you contribute to the achievement of international climate targets by reducing your CO₂ footprint.

The Comfort Energy Optimizer is a service that provides your building management system (all brands) with additional information to help it control its climate installations even better. The self-learning and predictive Comfort Energy Optimizer software continuously considers weather conditions, the changing supply of renewable energy sources and energy prices.

The software, developed in collaboration with Priva, 'thinks' 24 hours ahead, anticipates changes in these factors, and uses the building's heat capacity to climatize as energy-efficiently as possible. Naturally, all of this is done while maintaining perfect and stable comfort levels.

The Comfort Energy Optimizer and (Priva) Building Management System are linked via an easy-to-install Cloud Connector to form a 'winning team': the first optimizes and the second ensures correct and robust operation of the climate installations and guarantees the operation in a building by falling back on the basic climate control in case of an emergency.

Town Hall ‘Berg en Dal’, a case study

The municipality of ‘Berg en Dal’ (35,000 inhabitants) is located between Nijmegen and the German border in The Netherlands. Sustainability plays a major role in Dutch municipal policy. It is believed that the municipality has an exemplary role and decided to be the first municipality in the Netherlands to apply the Energy Optimizer in the town hall.



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Hans de Raef: Building manager, municipality of 'Berg en Dal'

"When it was explained to me exactly what the Comfort Energy Optimizer could mean in a large building, I was immediately enthusiastic. Because it is a completely new approach, I wanted an upfront guarantee on savings and I got it. Within the organization I managed to convince everyone of the necessity and usefulness of this measure. Budget was made available and the project could be started.

I emphasized beforehand that we are dealing with 250 users, who all have their own opinion about the indoor climate. The Comfort Energy Optimizer saves gas and also reduces CO₂ emissions. Of course, this is a good way to make it more sustainable, but it also has an impact on the indoor climate. I kept a close eye on that myself. The great thing was that I could pass on my feedback directly to the people behind the Comfort Energy Optimizer and that they could refine the settings remotely. Actually, the employees didn't notice anything, except for a few moments when it was a bit too cold. However, these were start-up problems and now that is no longer the case.

We have achieved great results and see even more opportunities to save energy. Besides the town hall, I also manage a swimming pool, which is one of the most energy-guzzling public buildings. The water must always have a temperature between 29 and 31 degrees Celsius. Outside the pool it should always be one degree higher. The Comfort Energy Optimizer could also mean a lot there".

Bart de Poot: Director of Potec (System integrator)

"We are honored to be actively involved in this new service. The Comfort Energy Optimizer brings new technology to the table. It takes some getting used to, but the big advantage is of course the energy savings that come with it.

In the week of the installation, the building manager, Hans de Raef, happened to have organized a 'warm sweater week'. As a result, the employees did not notice the temperature fluctuations that occurred when adjusting the Comfort Energy Optimizer. That was a nice bonus.

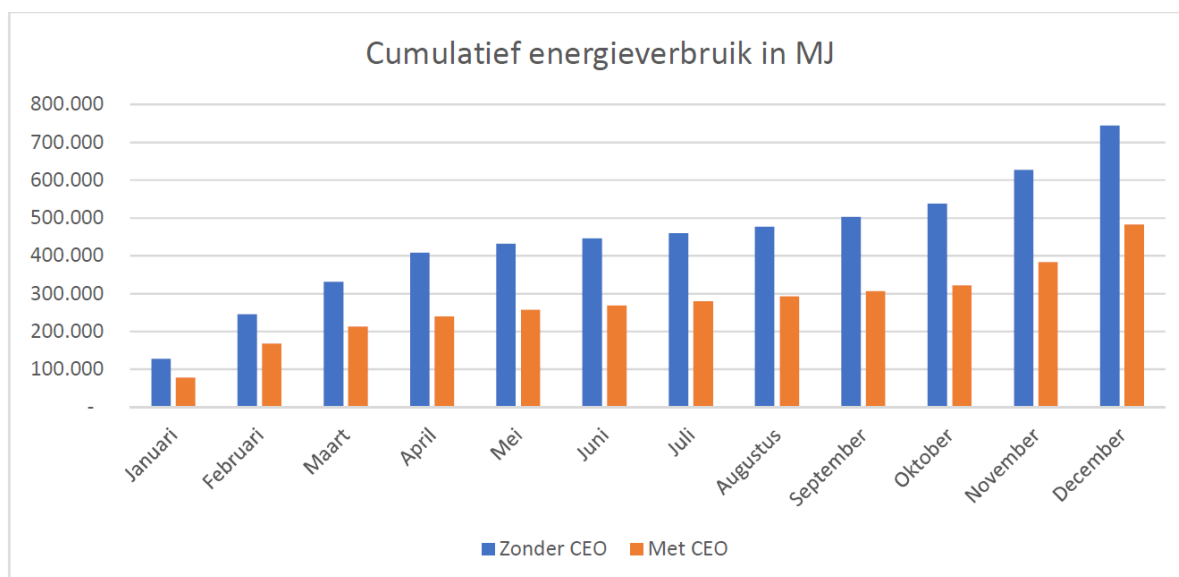
The municipality of 'Berg en Dal' is working on all kinds of solutions to be more responsible and sustainable. We could not tell them the exact outcome in advance. As a building manager, you do take a risk because 250 people work there. If something goes wrong with the temperature, everyone knocks on the door of the building manager. Ultimately, comfort is different for everyone, one wants to be nice and warm, the other prefers to work in a rather cool environment. You have to find a golden mean in that and you have succeeded".

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Energy Optimizer - Results town hall 'Berg en Dal'

The first year of the project Town Hall 'Berg en Dal' shows nice savings.



Energy saving (energetic)	35%
Gas	46,9%
Electra	1,5%
Financial savings	€ 4.817,84
CO ₂ reduction (metric tons)	17,30

Temperature measurements based on the weather station from the Royal Dutch Meteorological Institute. Consumption data according to certified measuring company and corrected to degree days methodology.