



Case study RAU Architects

Location	Amsterdam, the Netherlands
Philips Lighting	Solutions

PHILIPS
sense and simplicity

“I told Philips, ‘Listen, I need so many hours of light in my premises every year. You figure out how to do it. If you think you need a lamp, or electricity, or whatever – that’s fine. But I want nothing to do with it. I’m not interested in the product, just the performance. I want to buy light, and nothing else.’”

Thomas Rau



Pay-per-Lux – a whole new way to deliver light

Fast Facts

Client

RAU Architects

Location

Amsterdam, the Netherlands

Project

Pay-per-Lux

Philips Lighting Products & Services

Consumption-based illumination

Project team:

Eric Heutinck (Sales Manager)

Nico Karres (Account Manager)

Jan de Haan (Project Manager)

Marc de Nijs (Sales Engineer – TP&S)

Dennis Hermesen (Internal Project Leader)

Saskia van der Wolf (Lighting Designer)

Background

The RAU architectural agency is a unique one, due to its remarkable emphasis on sustainability. The “oneplanetarchitecture” approach developed by founder Thomas Rau goes beyond just focusing on energy-saving technology: the aim is to create buildings that can actually produce energy, and which consume and waste as few raw materials possible. Rau has even launched a special platform – turntoo – which advocates and facilitates “performance-based consumption”, in which manufacturers retain ownership of – and responsibility for – products such as carpets, furniture, tiles and more. Consumers pay just for the “performance” of these materials, which can later be reused or recycled by the manufacturer for other customers. Philips Lighting had worked with Thomas Rau as a lighting partner on a number of the agency’s projects, often providing project management and other services. So when he wanted to try and extend the concept of performance-based consumption to lighting, he came to us.

The challenge

When Thomas Rau decided to change the lighting at his agency, he knew in advance exactly what he wanted. This is rare, and usually makes a project much easier – but not in this case! He did not want to buy lamps, luminaires, cables or controls that he would eventually have to replace and dispose of. He simply wanted to buy the exact amount of light for workspaces and rooms that his employees needed when

using them for specific tasks – no more, and no less. This ‘Pay per Lux’ concept struck him as being more cost-effective as well as sustainable, but it presented Philips Lighting with the considerable challenge of developing a whole new and more abstract way of delivering light.

The solution

The first proposal called for a relatively high lighting level, with a substantial number of personally dimmable areas. But this approach was still too traditional and costly for Rau, who wanted to make do with as much natural, and as little artificial, light as possible. It became increasingly clear that the key element of our “services” in this project came down to developing a new kind of light plan and solution that would meet Rau’s demands. Together with our installation partner CasSombroek, we took an existing LED recessed luminaire for ceiling systems and adapted it so it could be hung in Rau’s high-roofed, industrial-type premises. This created individual, floating “ceilings” over workplaces, which could deliver effective, adjustable illumination directly on the areas where it was needed, while the rest of the office space remained relatively dim. A combined sensor and controller system further helped keep energy use to an absolute minimum, by dimming or brightening the artificial lighting in response to motion or the presence of daylight. It proved to be an extremely interesting experiment in – and proofpoint of – how little artificial light an office actually needs.

The benefits

Rau acquired exactly what he wanted: the exact amount of office illumination he needs at the price he wanted to pay. It's also very flexible lighting that can be personalized, changing in intensity – or from cool to warm white light – depending on the way the space is used and the preferences of the person using it. Nor was Rau burdened with the hassle of having to choose, decide or figure out how to achieve all this: Philips Lighting did it for him. Maintenance, of course, is included in the “Pay per Lux” concept. And whenever Rau's lighting needs change, we can either adapt the existing system further to his wishes, or simply reclaim our materials and recycle them via LightRec, our partner in responsible re-use of lighting components.

The collaboration delivered a number of valuable benefits to Philips Lighting too. The most important was a truly innovative – and proven – model for delivering light in a brand new and extremely sustainable way. A short video showcasing the project has already resulted in queries from numerous architectural agencies and installers who also want to “Pay per Lux”. We are now further developing the business underpinnings for this kind of financial proposal, and drawing up contracts that systemize the concept. Our solution for lighting the Rau offices has turned out to be an unexpectedly desirable product as well: many architects are now requesting the hanging LED luminaire for projects of their own. Lastly, after our successful work on the Rau project, the agency is asking us to collaborate on even more outside projects. In short, the Pay-per-Lux project is one that will continue to deliver a variety of benefits for some time to come.

<http://www.philips.com/solutions>



©2012 Koninklijke Philips Electronics N.V.
All rights reserved.

Document order number: 3222 635 66910