



Smarter warehouse lighting

A flexible and intelligent energy saving system



PHILIPS

Lidl Distribution Centre, Heerenveen, the Netherlands





A perfect package for warehouses

High bay used to mean high cost – with lighting installation and maintenance proving expensive and disruptive, and lighting controls only adding complexity. Not any more.

Simple and worry free

Our GreenWarehouse system offers you one simple, bundled solution that contains three types of dimmable LED luminaires and wireless controls, suitable for your warehouse, whatever its size.

Our innovative system is perfect for both open spaces and racking and because it's wireless, it's easy to configure into zones and reconfigure at any time. This offers you flexibility, helps you to maximize efficiency and effectively makes it a future proof solution. The system and its benefits are explained in more detail over the next few pages.

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Warehouse lighting has evolved

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Lighting on demand

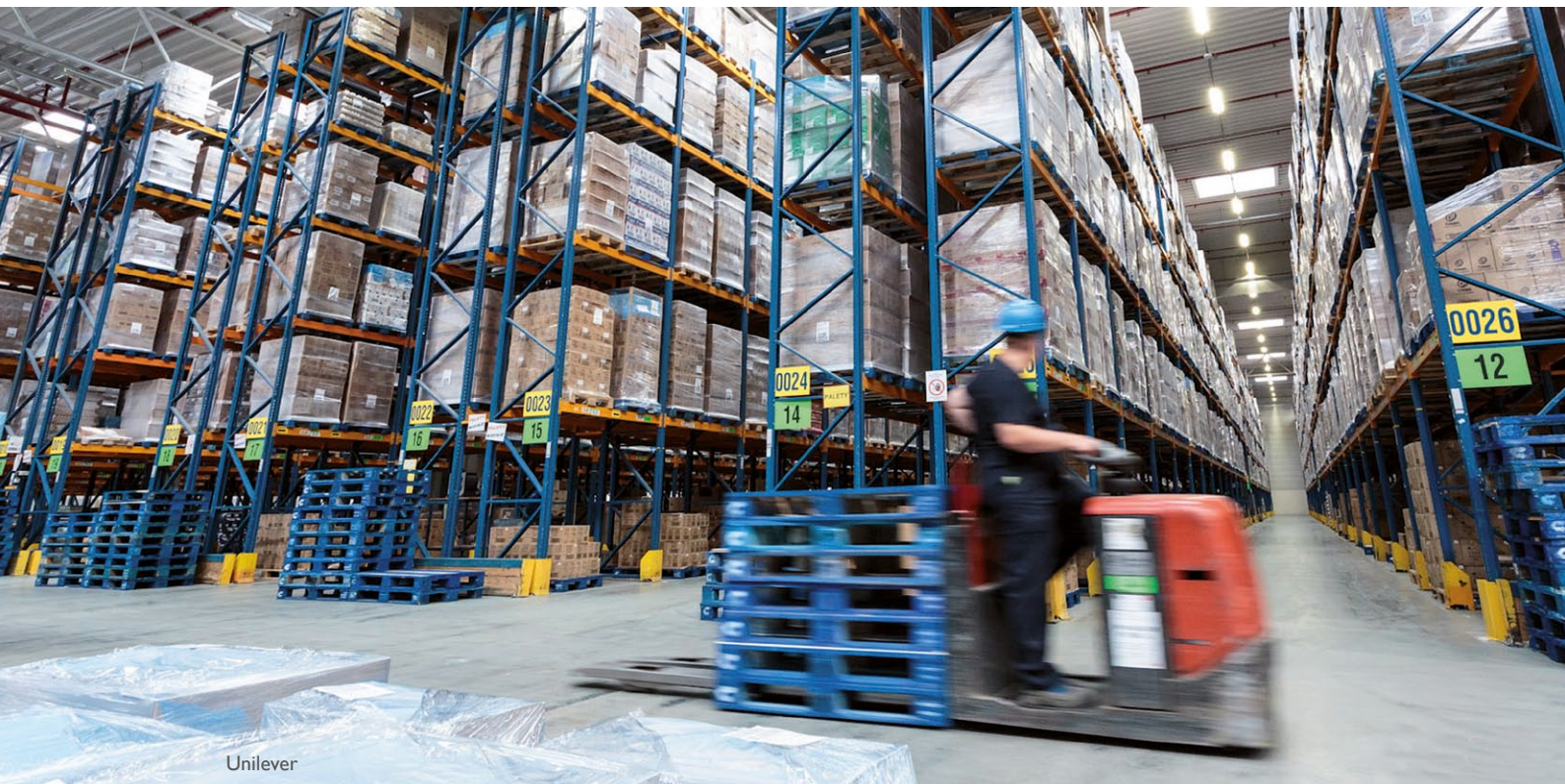
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Designed around you

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Our system and our promise to you

Warehouse lighting has evolved



Unilever

The evolution of controls

First there was traditional high bay lighting – inefficient and expensive to maintain. Then along came dimmable LED and changed the game, bringing with it the possibility of adding controls and presence detection to enhance lighting efficiency. But it wasn't always easy – high bay environments by their very nature making rewiring expensive and complex and if you wanted to make changes the whole process would start again.

To make things easier we have taken lighting controls to the next level. Our innovative, wireless system reduces installation time and complexity by avoiding control wires and we've made configuring the system extremely simple too. Everything can be done wirelessly, using a Philips remote control, with minimum installer input.

One lighting and controls bundle

To make things easier still, we've created one simple warehouse lighting package, by combining state-of-the-art, energy saving LED luminaires with wireless technology and controls. It's a bundle that is easy to order, install and commission – designed to enhance light quality and safety and reduce cost and carbon footprint, through flexible, programmable zoning, which allows you to adapt easily should your plans change. In short, through one smart system we can make it easy for you – both now and in future.



Brighter spaces, smart zones

You don't need all your space lit all the time, as it's unnecessarily wasteful and costly. This is where presence detection and smart zoning comes in – giving you the flexibility to set lighting at a comfortable, dimmed background level, which then automatically switches to 100% when movement is detected. Daylight harvesting can also be used to save up to an additional 20% in energy – the sensors in the luminaires adjusting the dimming automatically, based on ambient light levels.

Reduced maintenance

The LED luminaires used in our GreenWarehouse system have a reputation for reliability – with the addition of zoning, occupancy detection and controls that extend their lifetime further, even greater energy and cost reductions are possible – so you can enjoy a significantly lower cost of ownership compared to traditional lighting systems.

Health and wellbeing

Better light quality means increased comfort. When people feel better they work better, which means increased productivity, so everyone's happy. Our new generation of LED high-bay lighting gives more consistent light coverage, with no dark areas and better color rendering, so workers can do their jobs more comfortably and customers can feel the benefits too.

Reducing carbon footprint

Increasingly, organizations are being challenged to reduce their carbon footprint. Reducing your carbon emissions through our efficient GreenWarehouse lighting system offers energy savings of up to 50% – proof that lighting can make a valuable contribution to reducing both costs and carbon.

Controls without the complexity

The dimmable nature of LEDs means that wireless controls are a natural partner. While the cost and complexity associated with installing wired controls can be off-putting, our wireless system makes it easy, as we have combined everything together in one bundle and removed any complexity from installation, commissioning and day-to-day operation.

Achieving business goals

We understand the challenges you face, from a commercial perspective as well as a lighting one. Our pedigree in lighting means we're uniquely placed to keep innovating and we spend more than any other lighting company on research and development – and our focus is firmly on enhancing your business efficiency.

Lighting on demand

State-of-the-art LED

LED has come of age. As it's dimmable it can be combined with controls and presence detection and its full potential harnessed. By configuring lighting into zones this further reduces energy and costs.

Simple and cost effective

We've bundled everything you need together to make it more cost effective to purchase a system than separate components. Add to that the simplicity of having everything worked out in one package that's simple to order and install and you have the perfect recipe for a cost-effective retrofit or new high bay installation with a ceiling height of up to 12 meters.

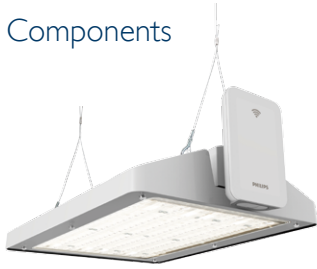
Speedy return on investment

Typical payback time for our GreenWarehouse system is just three years, as the combined efficiency of LED plus controls and zoning results in up to 50% energy and cost savings. Constant Light Output – adjusting over-lighting by dimming down to the correct lumen level from installation can create up to 10% additional energy savings.



Hisab Joker Company, Varberg, Sweden

Components



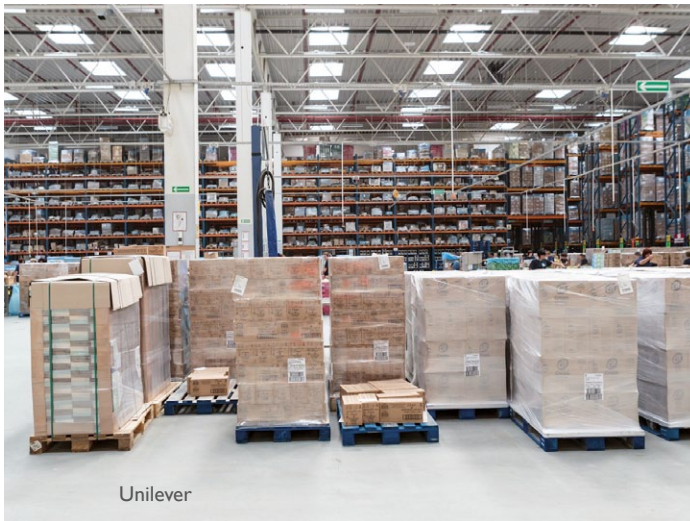
GentleSpace gen2



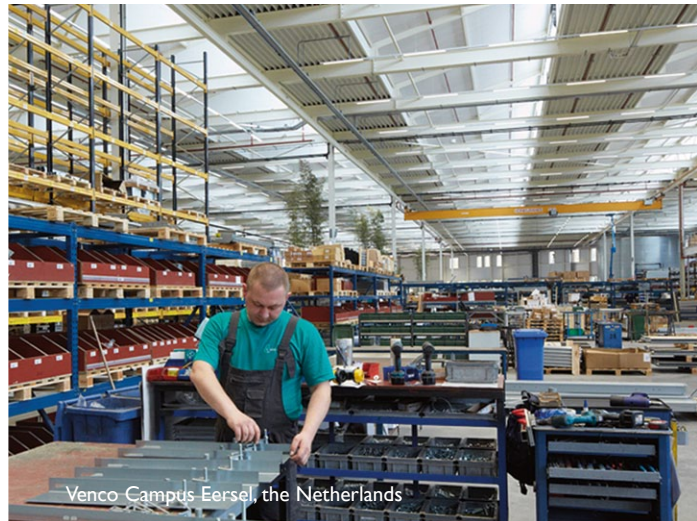
Maxos LED



Pacific LED

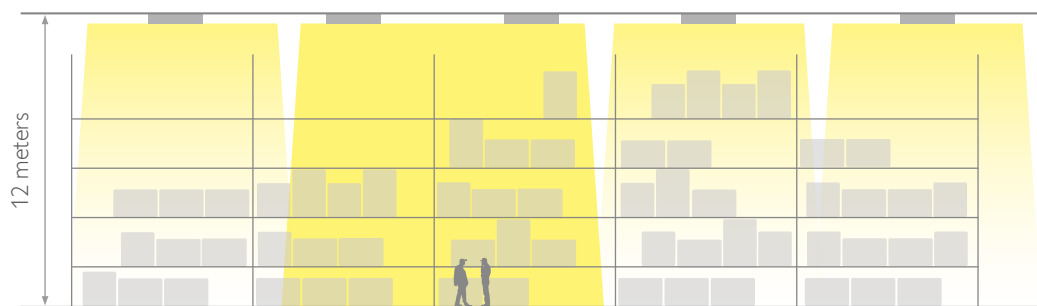
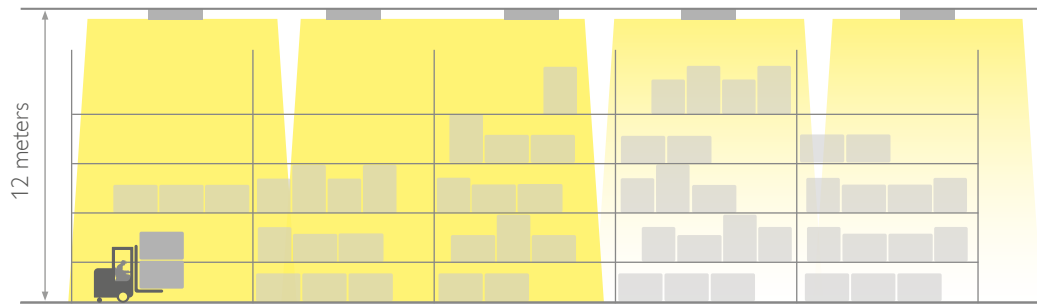


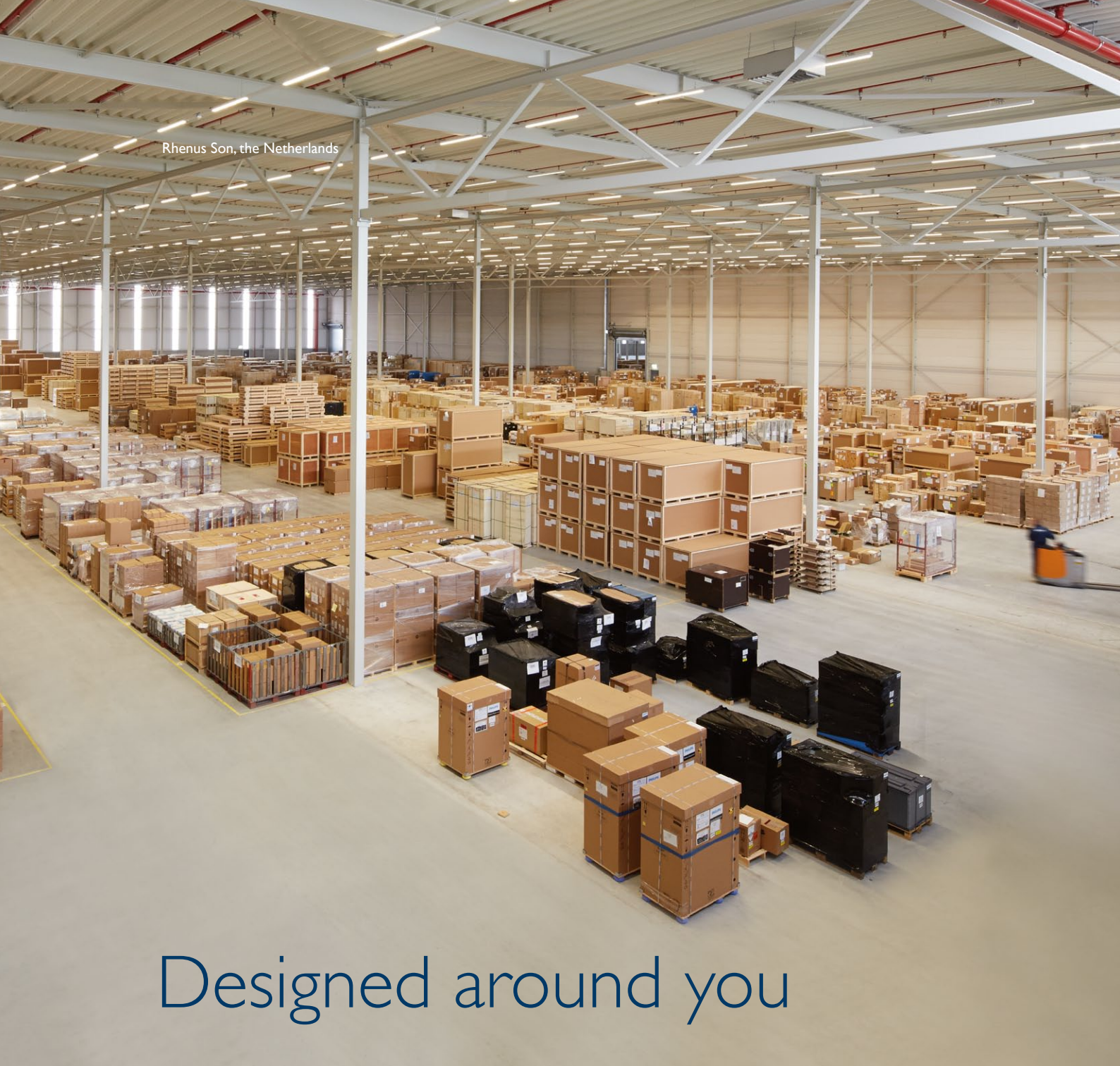
Unilever



Venco Campus Eersel, the Netherlands

Example zones of light





Designed around you

One smart bundle

We have created one package consisting of three different types of luminaire – GentleSpace for general open space lighting and Maxos LED and Pacific LED for racking, plus wireless controls. We can tailor a bundle to suit your warehouse, whatever its size, so the system is fully scalable.

Built for the future

Our approach to development is 'future proof', so you can be confident that the digital LED solutions available to you now will be a platform for growth and continue to meet your business needs as lighting technology and data management evolves.

New builds or retrofits

Our system is suitable for fast implementation and easy installation, whether you have a new development or need to refurbish an existing space with a more efficient point for point solution. You can install and commission the system yourself or we can do everything for you.

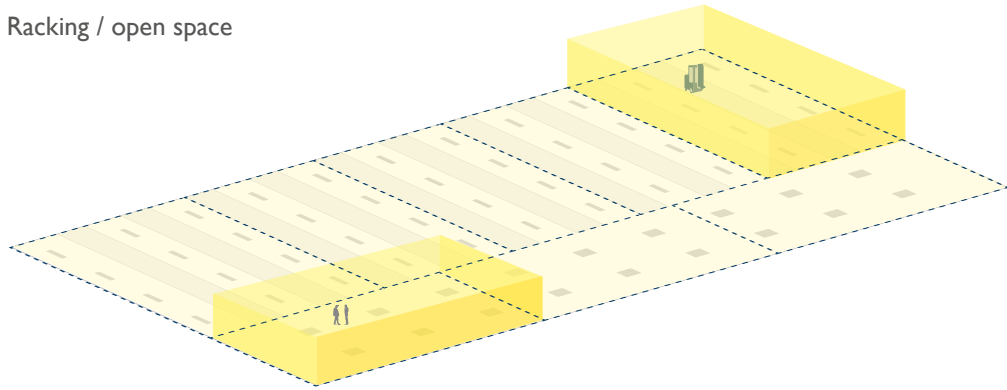


Smart zones

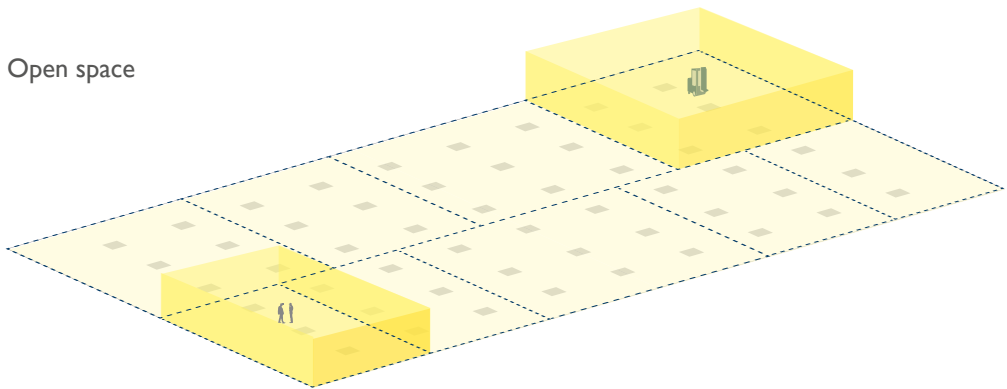
Wireless technology has changed the game. Now you can configure your luminaires into zones in whatever way makes best sense and reconfigure them via remote control if future plans mean your layout needs to change – all possible with minimum fuss and without the need for expensive rewiring.

Zoning examples

Racking / open space



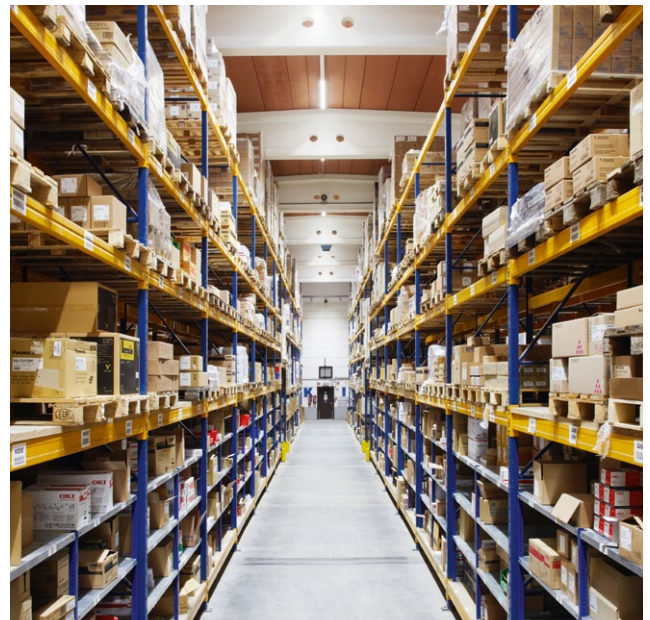
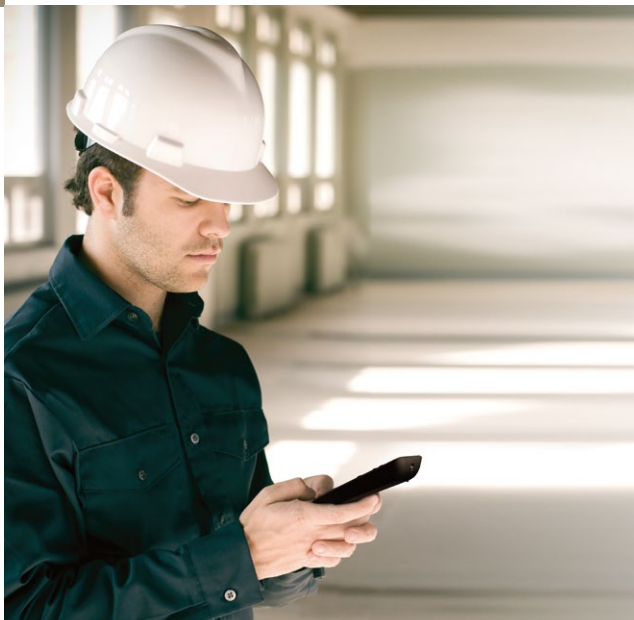
Open space



Zone at 100% light due to presence



Zone at background level due to no presence



AXRO, Hamburg, Germany

Our system and our promise to you



When you choose Philips as a lighting partner, you have everything in one package – one complete lighting system, one manufacturer and one warranty. The system carries our standard commitment guarantee that can be extended for up to 10 years. With the long lifetime of our LED luminaires, extended even further by smart controls, lamp failures are much less frequent than with traditional fluorescent technology. However, if you do experience any failures, you can count on our support and rest assured that we will be on hand to help resolve the issue.

Our system allows for easy rezoning should your layout change and as we develop our lighting to integrate with new and emerging technologies, we guarantee you a future proof solution – one that will allow you to upgrade and make enhancements to keep pace with your changing business needs, for example data management through the lighting system. For additional peace of mind we have a range of services available to you to cover every aspect of aftercare.

GreenWarehouse

Supply of a fully functioning system includes:

- Delivery of all hardware and software
- Manuals and instructions
- Commissioning of the installation
- Follow up within 3 months
- Option for Philips to install the system[†]

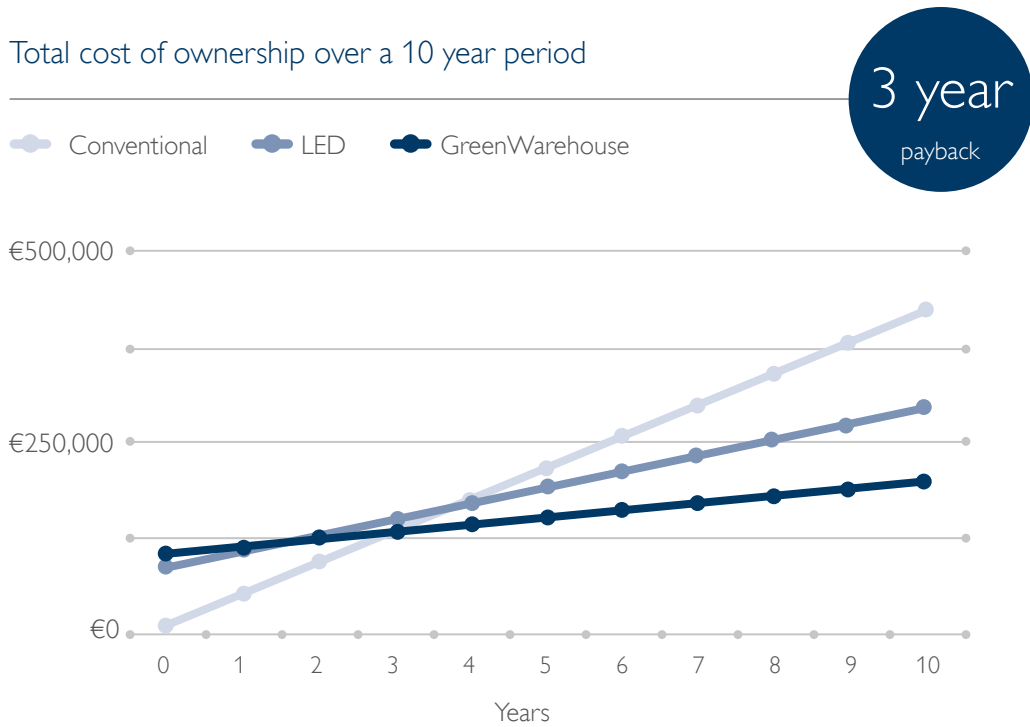
[†]Turnkey approach

Savings explained

The graphs below show the cost savings possible over 10 years (up to €220,000), by comparing the installation and running costs of our GreenWarehouse system with a traditional fluorescent solution and LED lighting installed without dimming controls.

Our cost of ownership calculation is based on a warehouse area of 10,000m². Our GreenWarehouse system gives a three year payback on investment compared with a conventional solution and a one year payback compared to an LED solution without dimming controls. €220,000 savings can be made over a 10 year period.

Total cost of ownership over a 10 year period



Return on investment example over a 10 year period





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