

A man in a blue and white striped shirt, a dark tie, and an orange safety vest is standing in a warehouse. He is holding a white tablet and looking at it with a slight smile. The background shows tall metal shelving units filled with cardboard boxes.

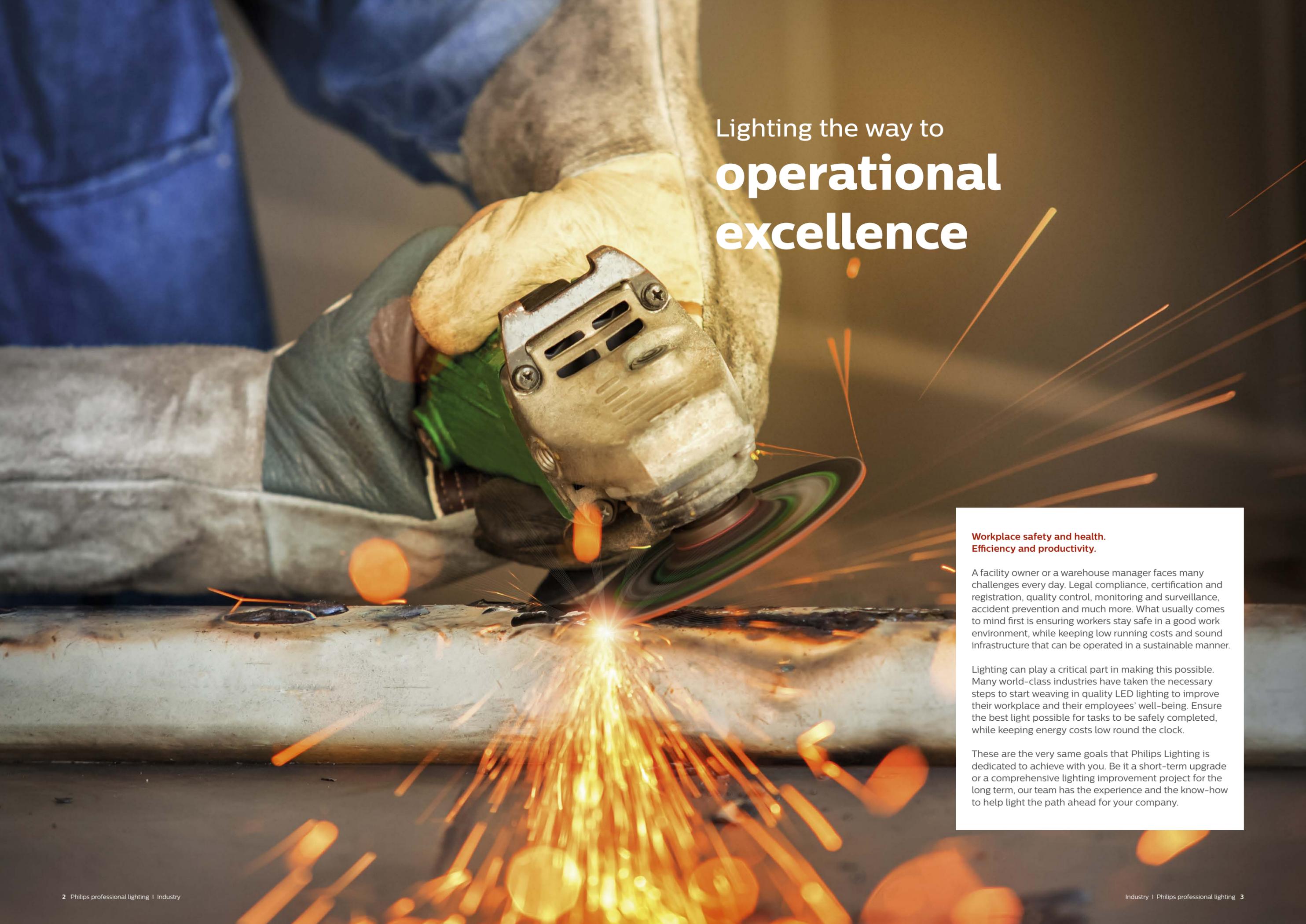
PHILIPS

Professional lighting

Industry



**Uplifting
productivity**



Lighting the way to
**operational
excellence**

**Workplace safety and health.
Efficiency and productivity.**

A facility owner or a warehouse manager faces many challenges every day. Legal compliance, certification and registration, quality control, monitoring and surveillance, accident prevention and much more. What usually comes to mind first is ensuring workers stay safe in a good work environment, while keeping low running costs and sound infrastructure that can be operated in a sustainable manner.

Lighting can play a critical part in making this possible. Many world-class industries have taken the necessary steps to start weaving in quality LED lighting to improve their workplace and their employees' well-being. Ensure the best light possible for tasks to be safely completed, while keeping energy costs low round the clock.

These are the very same goals that Philips Lighting is dedicated to achieve with you. Be it a short-term upgrade or a comprehensive lighting improvement project for the long term, our team has the experience and the know-how to help light the path ahead for your company.

Creating better, smarter and **safer workspaces**

Highest standards. Industry compliant.

Not just bright lights, but safety-compliant lights. The right lighting solutions should be incorporated within your facility spaces in efficient and effective ways. Amidst soaring energy prices and toughening legislation targets, lighting must be very carefully specified to ensure safety comes first, and that each zone is lit optimally and cost-efficiently to be suitable for specific tasks within every production line. Here's a short list of what our lighting solutions can offer you.

Energy savings – Saving energy and money via quality LED lighting is easy. Efficient lighting brings you instant savings, and with the portfolio from Philips, this could translate to energy savings of up to 75%.

Enhanced safety – Philips knows all about the right lighting levels and lumen output needed for different tasks. We also work with experts continuously to understand how lighting affects workers' morale, concentration and daily performance. When specified correctly, our lighting solutions can create an optimally-lit work environment that's safer and less straining for the operators.

Superior Color Rendering Index – Not all LEDs are made equal. Different types of illumination and different levels of light output quality can affect the perceived color of objects on which light falls. Color Rendering Index (CRI) is especially important for manufacturing industries and storage facilities where true, consistent colors on products and its packaging are expected to be seen at all times. Workers at warehouses are also expected to see that products and their packaging are of the right color, in order to be efficient during stock-taking and stock-picking.

Improved productivity – Philips lighting solutions are built to last. The long lifetime of fit-and-forget lighting solutions benefits your facilities – by reducing the need for maintenance, hence lowering your running costs. We have lights that are dust-resistant and waterproof, for use across assembly lines, cleanrooms, exposed outdoors and half-sheltered loading bays. We think about your investments and maintenance cycles before you do, so that you won't be caught offguard by untimely failures that can disrupt your production and hit your revenue.



Lighting that does it all

Superior colors. Superior savings.



Overview

of an industrial workplace



1
Warehouse



2
Production area
Low ceiling – 2 to 6 meters



3
Production area
Medium to high ceiling – 6 to 30 meters)



4
HACCP areas
and cleanroom



5
Control room
24/7



6
Offices



7
Indoor
parking and
loading bay



8
Outdoor
parking
and streets



9
Material
handling



Warehouse

Load up on smart lights

Often running round the clock, warehouses are expected to be efficiently operated 24/7. That's why lighting must be optimal most of the time, but flexible enough to be dimmed down or smartly synced by zones and sensors to illuminate just the right spaces in the right way at the right time. This way, safety is never compromised and the facility stays energy-efficient all the time. Comply with the most stringent building standards yet cut your monthly bills significantly. Low-maintenance highbay luminaires of optimal light distribution or affordable LED tubes are quality fittings essential to ensure your team stays focused on business and on daily operations, instead of frequently addressing work disruptions.



GreenUp Highbay



GreenPerform Highbay



SmartBright Highbay



SmartBay



Master LEDtube Ultra Output



Master LEDtube G5



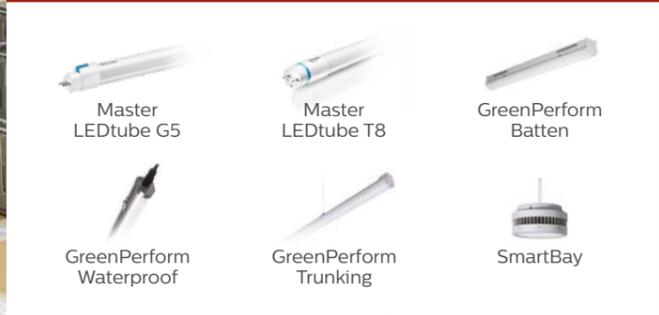
Master LEDtube T8



Production area

Low ceiling – 2 to 6 meters
Where cost-performance matters

The production area is where it all happens. Ensuring productivity while maintaining safety is crucial in this space. Lighting is not just a basic essential here, but the right lights can keep your team alert and focused, helping them complete tasks and optimizing everyone's performance and output. The latest Philips LED solutions can flexibly adapt to the different activities happening in each zone, while giving you every opportunity to lower energy consumption. Peak performance made possible on top of reduced electric bills.



Production area

Medium and high ceiling – 6 to 30 meters
No challenge too high

We are aware of the challenges of high ceiling production areas. Highbay environments are unique – and the issues you face as an owner or operator can come in various forms. With increased emphasis on cost savings and energy efficiency, every big and small disruption related to maintenance must be minimized to ensure operations always run smoothly. Reviewing your lighting solution, in this age of LEDs, is certainly a must. To help ensure maximum productivity and safety, Philips solutions deliver the best light distribution you require with our highbay portfolio. Manufactured under the most stringent processes, our range can confidently offer long lifespan and reduced maintenance. Our award-winning GreenUp Highbay, for instance, comes in Dali or Fixed versions, with wireless sensor and luminaire as one, delivering beyond your expectations.



GreenUp Highbay



GreenPerform Highbay



SmartBright Highbay



GreenPerform Trunking



Master LEDtube Ultra Output

We know the basic principles of how a cleanroom works. Philips Lighting has also been working with cleanroom consultants and customers to design the most suitable solutions for HACCP areas and cleanrooms. Numerous clean manufacturing procedures require special, controlled environments where the amount of dust and dirt must be controlled. Philips luminaires come tightly sealed, protected from the accumulation of dust and other particles that can contaminate such environments. Reviewing each process area, our specialists can determine the right illumination levels and the best dust-resistant lighting products for these zones. Superior color rendering index (CRI) also helps ensure what you see is truly what you get.



Hygeia



GreenPerform
Waterproof



GreenUp
Waterproof

HACCP areas and cleanrooms

No compromises, no worries

Control room 24/7

Always a ray of sunshine

A good control room needs to ensure productivity while giving your team a good change in environment, once they step out of the intense and busy production areas. Our lights can mimic natural daylight to help people focus and relax. A subtle palette of light that falls at all the right places can help improve concentration, while motivating the teams to perform even better. Lights can also be automatically dimmed down when the room is not in use. Our luminaires Coreline and PowerBalance are UGR < 19 which makes it ideal for control rooms, where full concentration on the screen is always needed. This is how dynamic lighting from Philips can boost overall well-being, drawing out the best in everyone, while bringing your energy costs down.



Coreline LED Troffer G2



PowerBalance LED Troffer G2



LuxSpace LED Downlight G4



Master LEDtube G5



Master LEDtube T8



Essential LEDtube

Offices

Setting the light mood

When your facility is optimized for round the clock manufacturing, the space left for office use often gets overlooked, turning into an area that is functional but not necessarily the best workplace to motivate your team. With the right LED lighting, even for windowless rooms, you can create the right people-centric office ambience that works in harmony with people's natural rhythms. Lighting can now be easily adjusted to suit different tasks at hand, allowing quiet cells for concentration or energetic recharge stations for team bonding and a healthy exchange of ideas.



GreenSpace LED
Downlight G4



SmartBright LED
Downlight G3



SmartBright
LED Troffer G2



CoreView
Troffer



Master
LEDtube G5



Master
LEDtube T8



Essential
LEDtube



Indoor parking and loading bay

Leading the way safely

Lighten your worries as your vehicles enter the loading bay. With tons of goods getting off-loaded or trucked off to your customers' grounds, it is essential to let your logistics team enjoy high visibility and eye comfort. For sure, this will help them when handling strenuous duties at the loading bay, or at the indoor or outdoor parking areas. With LED solutions that can come in the form of cost-efficient or waterproof battens suitable for sheltered spots, you can keep energy bills down – and your team's motivation level up as they work in a safe, well-lit environment.

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|---|--|--|
| 
GreenPerform
Waterproof | 
GreenUp
Waterproof | 
SmartBright
LED Waterproof |
| 
Mini500 | 
Master
LEDtube G5 | 
Master
LEDtube T8 |

Warehouse



Control room 24/7



**Production area
Low ceiling – 2 to 6 meters**



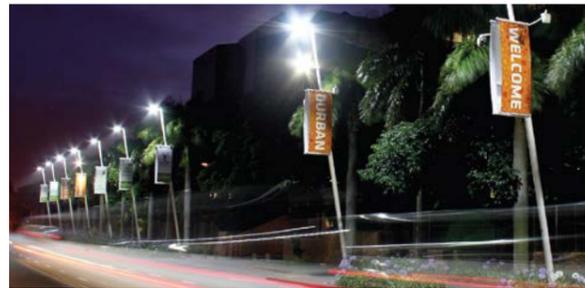
Offices



**Production area
Medium and high ceiling – 6 to 30 meters**



Outdoor parking and streets



HACCP areas and cleanrooms



Material handling



We've got you covered

As your lighting solutions partner, we aim to give you complete one-stop solutions that can maximize your investment. We can customize our solutions and professional services to meet your specifications, standards and budgets. What's more, we stay ahead of lighting trends to make your space as multi-functional and as future-proof as possible.



Green lighting at work





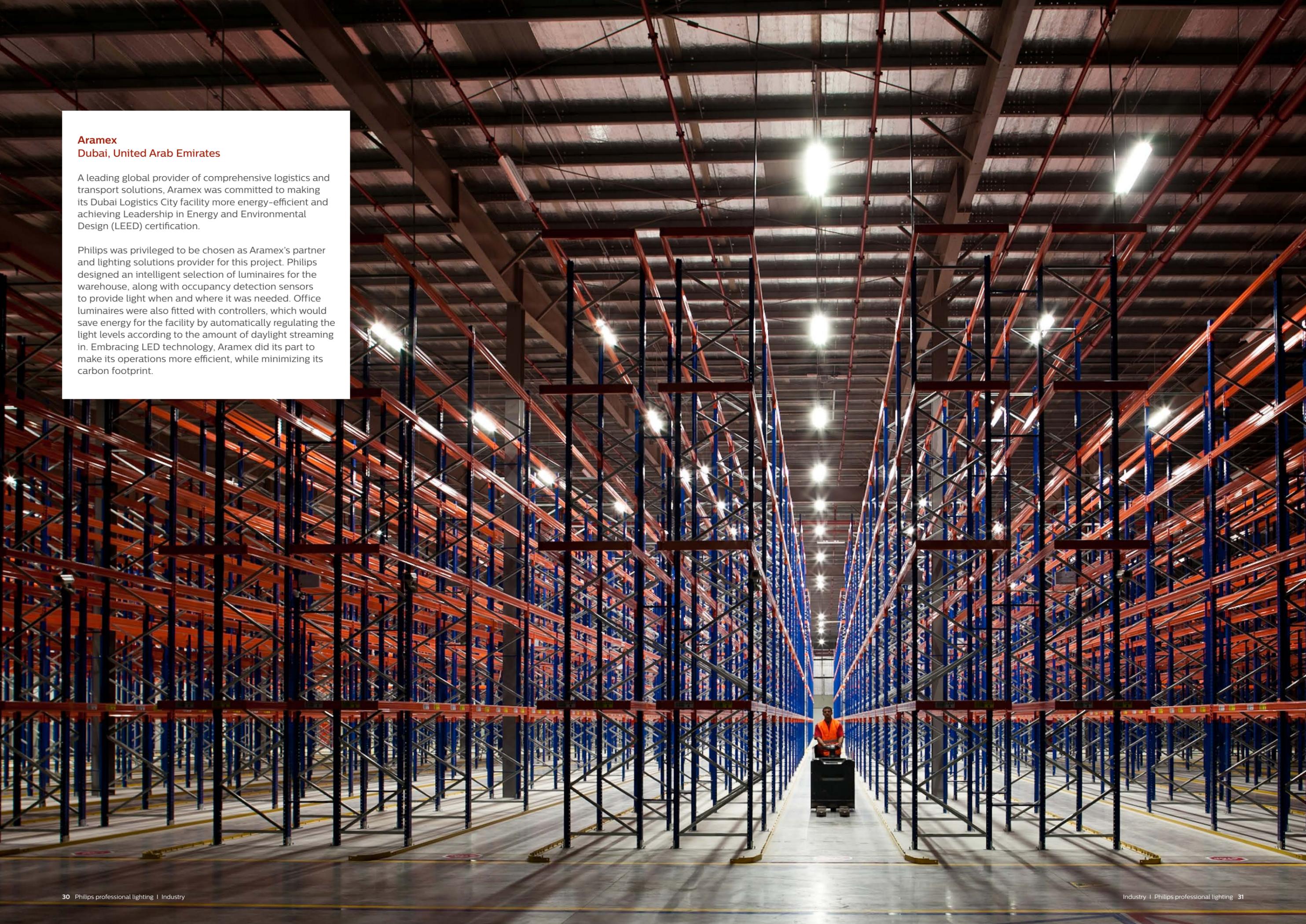
Tan Hiep Phat Beverage Group
Ha Nam Province, Vietnam

Vietnam's leading beverage producer Tan Hiep Phat (THP) wanted its state-of-the-art headquarters to be the benchmark for offices and manufacturing plants in Vietnam. Partnering with Philips Lighting, the owners at THP started the process of specifying innovative lights to improve safety, efficiency and productivity at its facility. Built for industrial applications, GreenPerform LED Highbay, with its high powered lights, glare reduction feature and superior color rendering index (CRI), made examining colored packaging and labels easier. Meanwhile, Hygeia luminaires of high standards were applied to areas requiring dust-resistant lights. GreenVision Xceed road luminaires were installed to safeguard the factory premises, ensuring security and brightness all around. With 40% energy savings, THP can affirm its commitment to the environment as a green organization, while ensuring reduced running costs and a happier workforce.

Aramex
Dubai, United Arab Emirates

A leading global provider of comprehensive logistics and transport solutions, Aramex was committed to making its Dubai Logistics City facility more energy-efficient and achieving Leadership in Energy and Environmental Design (LEED) certification.

Philips was privileged to be chosen as Aramex's partner and lighting solutions provider for this project. Philips designed an intelligent selection of luminaires for the warehouse, along with occupancy detection sensors to provide light when and where it was needed. Office luminaires were also fitted with controllers, which would save energy for the facility by automatically regulating the light levels according to the amount of daylight streaming in. Embracing LED technology, Aramex did its part to make its operations more efficient, while minimizing its carbon footprint.





Frisian Flag Indonesia
East Jakarta, Indonesia

Manufacturer of children's dairy-based nutritional products for more than 90 years, PT Frisian Flag Indonesia (also known as Susu Bendera) engaged Philips to provide quality lighting solutions for two of its production facilities in Pasar Rebo and Ciracas in East Jakarta.

One of Indonesia's top producers in the industry, Frisian Flag was determined to upgrade its factories, and gave Philips a clear brief: to improve the light quality in its premises, to boost employee's productivity and to lower its high energy consumption. A massive number of lighting points had to be replaced, and 4779 units of energy-efficient and easy retrofit solution – Master LED tubes were installed, making an instant difference for the customer. High ceilings were additionally fitted with GreenPerform Highbay to ensure low maintenance, quality lights offering optimal light distribution were incorporated. With GreenVision Xceed LED lights installed in the outdoor parking areas, the company carefully measured its energy consumption over time, gaining 58% energy savings per year and significantly lowering its maintenance costs. More importantly, the Frisian Flag team now enjoys a safer, greener and more comfortable work environment that they can be proud of every day.



**Loreal Factory
Cairo, Egypt**

World-leading cosmetics manufacturer L’Oreal entrusted Philips to manage its lighting design for its factory in Cairo, Egypt. As the facility was massive, equating to volumes of lighting points to be addressed, the brief was to ensure sustainable and longer lasting lighting solutions were specified. The clients wanted the premises to be optimally lit, with consistent light output, and for the project to be completed with minimum installation effort. A mixture of recessed, high-bay and suspended energy-saving solutions: Fugato, T5 HighBay and Savio were efficiently installed to meet the requirements. And the result, a well-lit and sustainable environment that is at the same time safe and productive for its owners and its employees.



Royal Mail NDC
Daventry, United Kingdom

Royal Mail engaged Philips for the overhaul of the lighting system of its 30-acre National Distribution Center, which employs over 700 people and handles over 40% of UK's daily mail. Philips, in partnership with Romec-BBTS, took to the challenge and provided Royal Mail with a LED lighting scheme that was sensitive to the operational needs of the large building. The new fixtures were installed across the site, with minimal disruption to day-to-day operations. The LEDs delivered optimal light quality while making sure the environment stayed conducive and pleasant for its team. LED high-bay luminaires were scoped in to ensure low maintenance for its high ceilings. The flat design of Gentlespace luminaire also meant an effortless installation without obstructing sprinkler systems and beams. The new warehouse lighting system provides Royal Mail with energy savings worth £9,000 per year, the equivalent of 61,712kg less carbon dioxide emissions.



**Pegasus Engineering
Christchurch, New Zealand**

Pegasus Engineering turned to Philips for a complete suite of lighting solutions for its premises, which included a workshop, a loading bay and administrative spaces in the Izone Business Park in Christchurch. Pegasus was keen to look at leading edge LED technology, and the final installations included the Philips Mini 500 LED and GreenPerform LED HighBay luminaire to encourage optimal energy savings and to lower maintenance costs for the facility. Running costs were lowered significantly, making a valuable contribution to the business, as well as reducing the company's carbon footprint. For the offices, a range of Philips LED luminaires: Coreline, LuxSpace, SmartPanel and SmartSpot were installed. The full project after completion, delivered nearly 50% energy savings every year – a figure Pegasus Engineering was truly pleased with. The result – a facility boosted with LED solutions' precision-controlled optics, allowing light to fall at all the right places. Improving visibility and workplace safety at the same time.

Beyond illumination





Support from **start to finish**

With offices around the world, we have extensive experience handling lighting challenges on behalf of our customers. We aim to be your best business partner, offering the right expertise and solutions. Allow us to help you with planning, implementing and maintaining your project every step of the way.



Advisory Services

Can a lighting upgrade help your business grow? Get an expert light audit from Philips Advisory Services

- Auditing your energy consumption
- Bringing creative ideas to life
- Helping you plan, making it happen
- Helping you convince the team



Project Services

Get your lighting installation completed quickly and efficiently, with Philips Lighting Project Services

- Project management
- Installing your system
- Integrating and programming

Note: Certain services may not be available in all countries.



Lifecycle Services

Let Philips handle your installation with these tailored service agreements

- Essential agreement:
Protecting your investment
- Premium agreements:
Ensuring hassle-free and fixed fee operations
- Premium+ agreements:
Meet and optimize your business objectives



Philips Lighting Capital

Finance your new lighting system with little to no upfront investment

- Protecting your cash flow
- Saving you time and money



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July 2015