

Sustainable modernisation
Conversion of existing lighting systems

BEGA





Cost-effective conversion efficient continued use

Are you drawing up plans for a new lighting system?
Or are you looking for a low-cost way to convert
an existing, intact system that blends in seamlessly
with its surroundings to accommodate modern,
energy-efficient LED technology?

BEGA customers are often faced with these two
questions.

The fact that, even after many years of use, our
lighting systems remain in perfect condition can
prompt customers to think about ways they can
modernise their spaces more generally. One of the
main reasons for this is the ban on conventional
lamps, if nothing else.

The conversion of existing lighting systems goes
hand in hand with significant operational energy
saving benefits. This results not only in efficient
continued use but, in particular, gives systems
a new lease of life lasting decades.



Sustainability in design, construction and use of materials

Even after decades of use, BEGA luminaires perform their function without a hitch at all times. Our products, and, hence, the people who use them, benefit from meticulous construction, timeless design, premium and extremely long-lasting materials, future-oriented technology and, as a result, enduring quality to eclipse the average market competitor.

Switching out conventional lamps for energy-saving LED modules establishes a temporal bridge to the coming decades. State-of-the-art light sources – delivered to size and easy to convert – make it possible to modernise your spaces in a cost-effective and sustainable way without compromising on quality. For the utmost satisfaction of anyone operating the system, for meaningful reductions in energy consumption and, as a result, for the protection of the environment.

Advantages of original components: the BEGA LED modules

The LED modules made in our factory are individually designed for each luminaire as original BEGA components. In particular, the modules boast an impressively long service life, very low energy consumption and guarantee sustainable use over an exceptionally long period of time.

We guarantee the availability of successor and replacement modules even 20 years after a BEGA LED luminaire is purchased.

Even if the technology and design of the components has changed in the meantime, the replacements will match the light colour and output of the modules originally installed.

Our luminaires and modules are designed in such a way as to enable trouble-free replacement of the lamps on site using standard tools.

BEGA expert advice

Regardless of the original composition of your existing system, we can assess and future-proof your plans from a technical perspective:

- Can and should the existing system continue to be operated using the original technology?
- When would conversion to LED lamps be worthwhile financially?
- Can funding programmes help finance the project?
- Which option makes the most sense economically: converting the existing system or designing a whole new system?



Conversions that make sense

We have summarised the most important aspects to consider when assessing whether and in what form a conversion of an existing lighting system would be worthwhile and, indeed, possible below.

- Significant improvement in **light and illumination quality** thanks to LED: comfortable light perception, more efficient illumination and more effective glare avoidance
- **Energy savings** when comparing existing systems with retrofitted ones
- Required **degree of illuminance** – current state and change after conversion
- **Technical data and performance features of the luminaires:** luminaire light output (lumen per watt), recommended colour temperature, colour rendering index, maximum ambient temperature, service life criteria
- Cost-benefit analysis: converting the existing system or designing an entire new one – which option is most beneficial?



Conversion of a pendant luminaire with compact fluorescent lamp to LED



What we offer

BEGA luminaires and their components are not disposable products. The efficiency of our products is characterised by long lifecycles that set the standard for the rest of the market. They are designed to be used for decades.

Even after such long periods of use, modernising the technology behind the luminaires and bringing them in line with modern requirements only takes a few steps. This is how we interpret sustainability.

We offer custom solutions for your lighting systems.

Conversion kits

for upgrades on site

Ready-made conversion kits allow you to upgrade your lighting systems on site.

- **Low installation effort** thanks to pre-assembled, custom LED modules
- **Availability guarantee** of 20 years for all replacement modules, resulting in maximum service life
- Surface **care sets** for refreshing the look of luminaire housing and other components

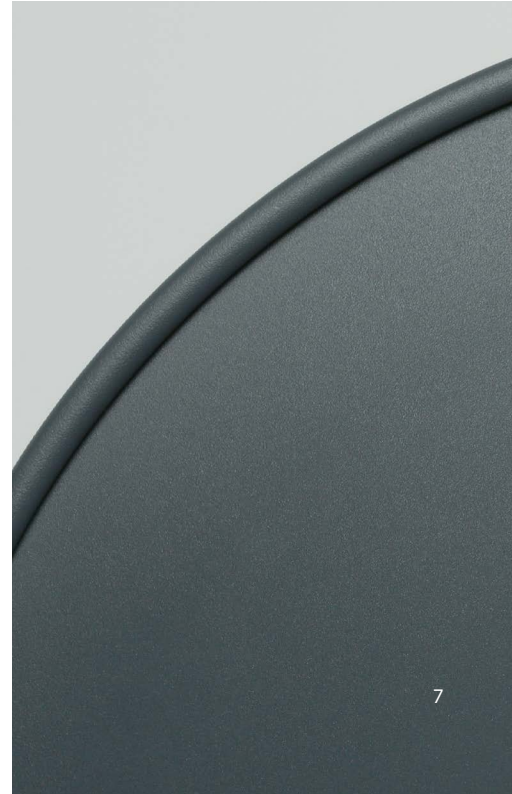


Conversion service

includes reconditioning

We provide a professional reconditioning service for your luminaires in our factory.

- **Conversion to LED technology** by BEGA experts
- General **assessment of the condition** of all lighting components
- **Availability guarantee** of 20 years for all replacement modules, resulting in maximum service life
- Reconditioning of **surfaces**
- Systems look and function like a **new product** after they have been reconditioned
- Same warranty and guaranteed service life as with a new product



Practical application example:
Conversion of inner-city lighting in Tauberbischofsheim

For more than two decades, BEGA pole-top luminaires have defined the unmistakable appearance of the centre of Tauberbischofsheim. When redesigning its pedestrian zone, this small tradition-steeped German town placed great importance on maintaining the eye-catching form of the “Rome” wall and pole-top luminaires from the Collection BOOM.

Even after many years of being in operation, the luminaires remained pristine to the eye. As a result, initial plans to buy brand new systems were quickly scrapped. Thanks to their exceptional material preservation qualities and coatings, continued operation of the luminaires proved the most sensible option from an aesthetic, economic and environmental point of view.

Once the luminaires had been professionally cleaned, all that was left to do was invest in the conversion to state-of-the-art LED technology.



Background

The mercury vapour lamps in use had to be replaced by LED modules.

Requirements for the conversion:

- no glare
- more than simply selective façade lighting
- pleasant illumination of public spaces, façades and installation surfaces

The solution

Conversion kits allowing the light from the LED modules to be distributed softly and evenly thanks to an opal glass sphere.

The conversion process was carried out in compliance with all requirements relating to luminous flux, light distribution and light source positioning.

The result

The characteristic inner-city lighting survives through the existing luminaires but has been updated to modern standards and, as a consequence, is geared towards dependable operation for decades to come. As well as this, all economic, environmental and aesthetic requirements were also taken into account.

You can find more information about this project on our website at bega.com/R0204.



Practical application example:
Modernisation during continued operation in the Trier area

The conversion of the street lighting systems in the Trier area took place gradually. Various BEGA pole-top luminaires, which had been in use for many years, were equipped with LED lamps over the course of the modernisation project. Before, the luminaires were fitted with conventional lamps (70 watt halogen metal halide lamps, amongst others). For pole-top luminaires like these, BEGA supplies custom LED conversion kits which, from a technical perspective, bring the luminaires in line with successor models available as standard.



The process

The switch to energy-efficient and high-performance LED technology was carried out during ongoing operation.

BEGA only needs details about article numbers and production codes to provide a suitable LED conversion kit.

All the necessary information has been documented on every luminaire's type plate for decades.

LED modules and new power supplies are available on site to replace the conventional light sources.

In the Trier practical example, a recalculation of the lighting design ensured that the illumination requirements could continue to be satisfied and even exceeded.

The result

Step by step, the luminaires were able to be converted without much hassle for the street lighting operator. The luminaires remained in operation – regardless of whether they had already been converted or were still using the original technology.

Our service:

We work with you to plan the conversion of your existing system. From the financial analysis all the way to implementation, our personal service is there to support you.

Get in touch!

How to contact us

exporte@bega.com
Phone +49 2373 966-0

What we need from you

- Details about the dimensions of your system and the specific conversion request
- Article numbers and production codes for the existing luminaires as per the type plate
- Description of the condition of the system and the luminaires, documented with photos
- Information about how you would like to operate your luminaires as well as any additional requirements and requests

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