

siteco



Future  
City.

We take responsibility for your light –  
lighting technology designed and engineered in Germany.

Shape the  
future of cities.





# Sustainability

Flexibility  
Quality of life

Being really green  
requires action,  
not words.

Cutting costs is the top priority for many municipalities. Yet an incredible 90 % of streetlighting in Europe is still conventional. Even though LED lighting enables up to 80 % savings in energy and CO<sub>2</sub>.

One thing is certain: The need to take responsibility for the sustainable use of our resources is greater than ever. The reduction of CO<sub>2</sub> and the protection of environment and species are challenges that span generations. Sustainable investments in the future are therefore necessary – and feasible.

**SITECO considers sustainability  
in all dimensions.**



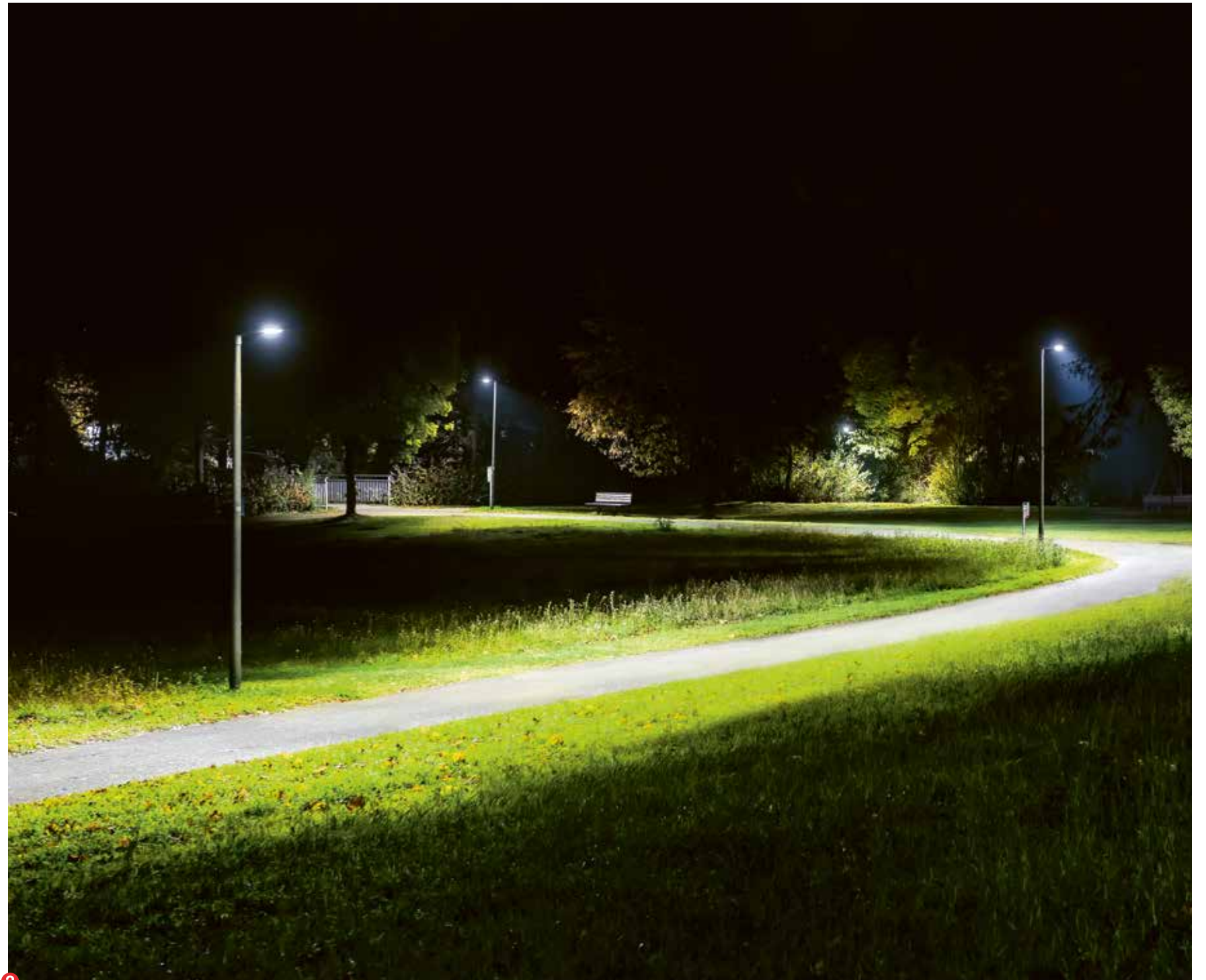
## Spend less for much better light brings joy.

Investing in sustainability pays off, especially when modernizing public lighting. And the best thing: Where they're available, governmental funding programs are a joy for every city treasurer. In application, significant levels of CO<sub>2</sub> as well as energy costs are saved with every hour of operation.

Design for sustainability – with SITECO's design principle, continuously high performing premium LEDs with thermal management and high-precision lighting technologies without light spill or glare are a matter of course. Perfectly matched for maximum efficiency.

The German town of Sulzbach-Rosenberg aims to convert 90 % of its street lighting to efficient LED technology and is already benefiting from the investments made:

**70** %  
CO<sub>2</sub> savings



1 + 2

Project: Town of Sulzbach-Rosenberg, Germany

Product: Streetlight SL 11



Project: Town of Waren an der Müritz, Germany  
 Product: DL° 50, DL° 20, Floodlight FL 20

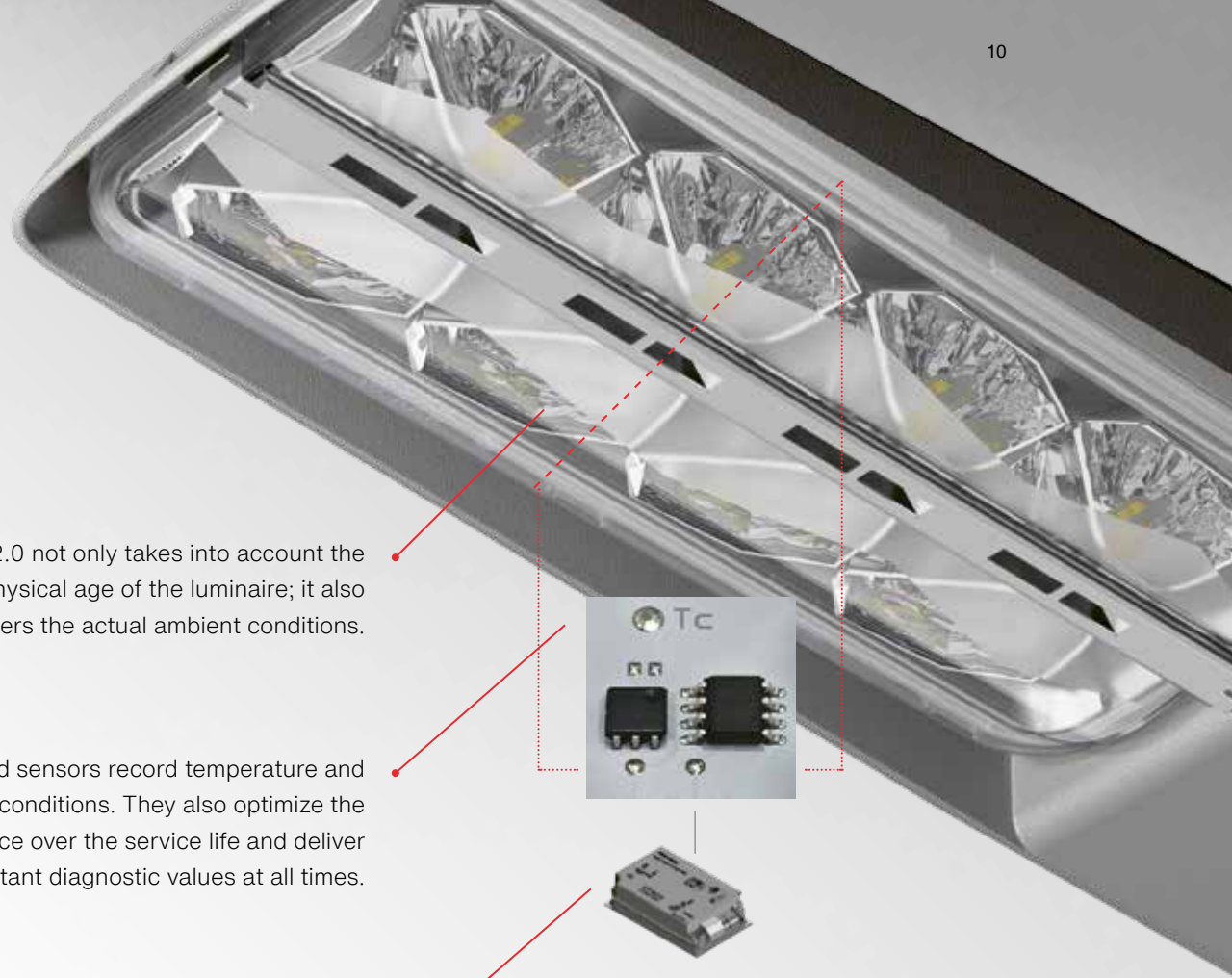


## We guarantee: Absolutely reliable with minimum operating costs.

Reliability and durability are a must for outdoor luminaires. Luminaires with die-cast aluminum housings and IP66 protection ratings continuously withstand adverse weather and reliably achieve optimum values in terms of operating hours. And thanks to modular construction, simple component replacement ensures the next luminaire life can start straight away. The globally unique SITECO constant luminous flux tracking CLO 2.0 saves additional energy and prevents excess-planning.

In the German town of Waren an der Müritz, public lighting optimally adapts its luminous flux to the specific conditions, thereby achieving previously unimagined performance values.

**100,000** hours  
 service life



CLO 2.0 not only takes into account the physical age of the luminaire; it also considers the actual ambient conditions.

Integrated sensors record temperature and operating conditions. They also optimize the illuminance over the service life and deliver important diagnostic values at all times.

The ECG is the control center and adapts the current feed according to requirements.



## Our luminaires know how the weather is.

Luminous flux tracking is nothing new in itself. Until now though it was based on predefined laboratory values with a constant room temperature of 25 degrees Celsius. Where does that exist?

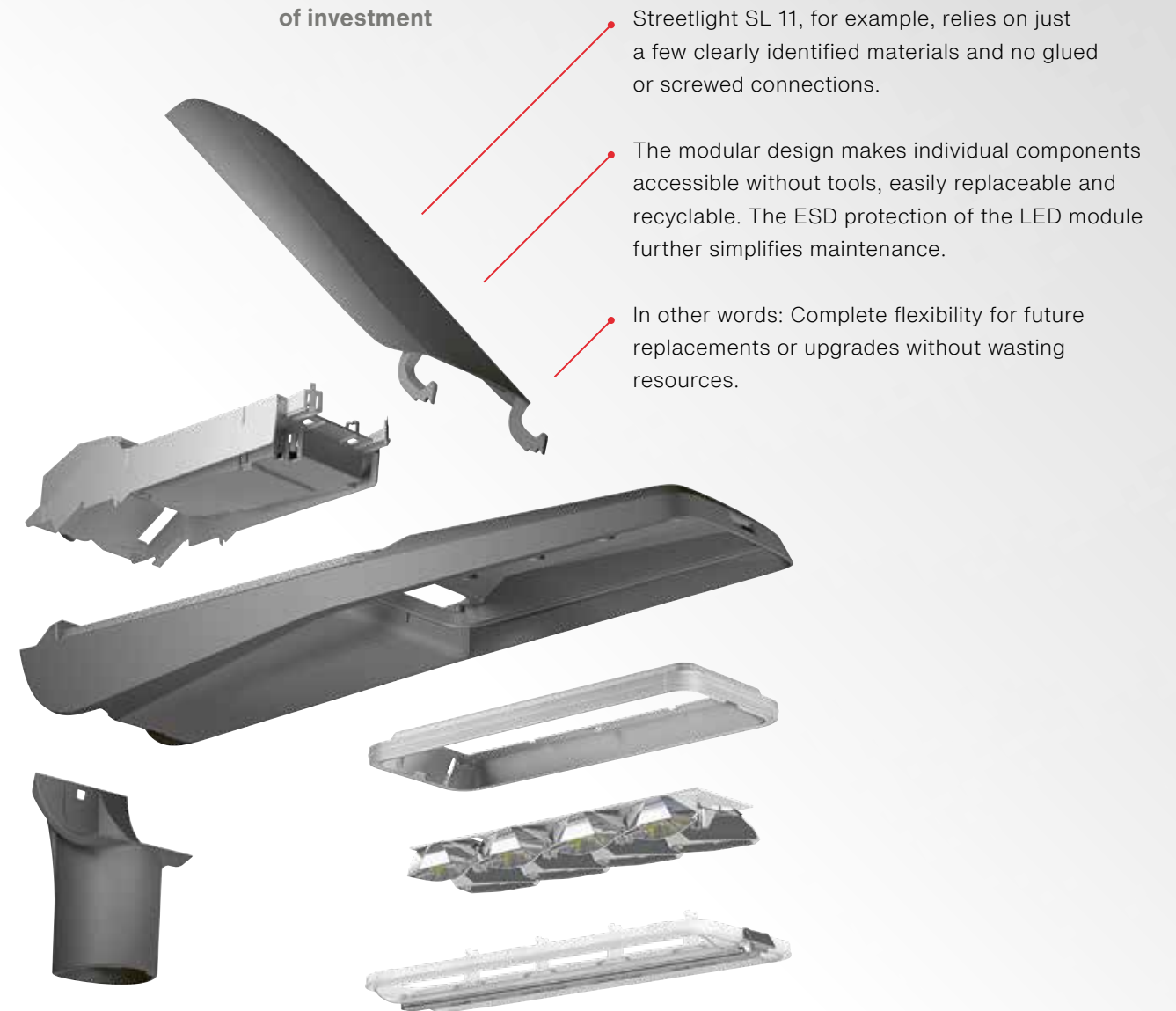
This is precisely why, with its patented CLO 2.0 control option, SITECO works with real-life conditions. CLO 2.0 stands for temperature-dependent current feed and thus for 100% constant light – only as much electricity is supplied as required in real life. The benefit is clearly quantifiable:

up to **6%** additional energy saving

## Circular economy implemented honestly.

The sustainability of a product begins with the production and ends with the disposal. This is why SITECO manufactures outdoor luminaires in an energy-optimized process in Germany – a further advantage of *Made in Germany*. The sophisticated design principle is the basis for a sustainable recycling economy with an extremely high recycling rate.

**90%** preservation of investment



Streetlight SL 11, for example, relies on just a few clearly identified materials and no glued or screwed connections.

The modular design makes individual components accessible without tools, easily replaceable and recyclable. The ESD protection of the LED module further simplifies maintenance.

In other words: Complete flexibility for future replacements or upgrades without wasting resources.

# Smart City also means smart investments.

The cost savings over the installation lifespan are often upward of 50 %, because the best product for your requirements has a dramatic impact on your future operating overheads.

We are also pleased to offer light as a service for our customers. In such cases, we bear the investment costs and risks ourselves. And always select the best product for you.

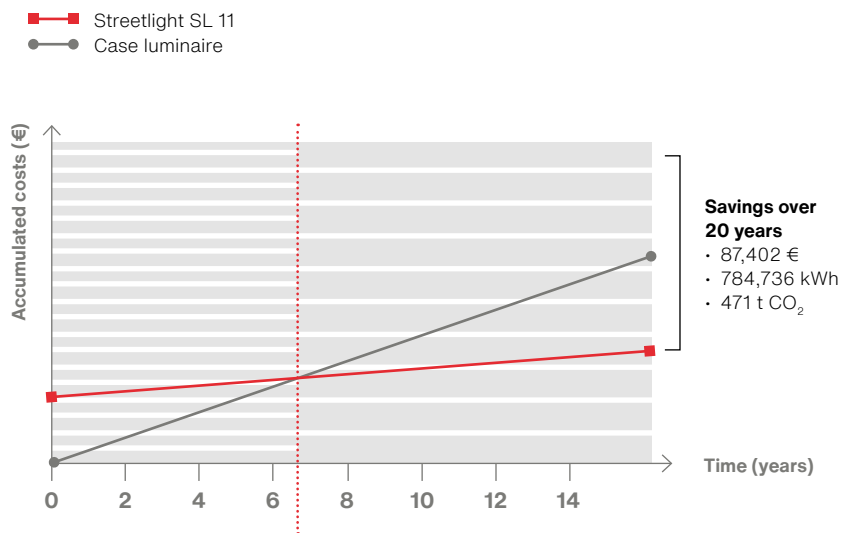
**SITECO enables all scales of project, from pilot to a major step.**

The SITECO audit provides complete transparency about the energy consumption and CO<sub>2</sub> emissions of your existing system.

Our lighting consultants design a solution that is based on your requirements and tailored to your needs.

The result: Clarity on your cost and energy savings potential made completely transparent thanks to our detailed TCO comparison calculation.

**Total cost of ownership (TCO) comparative calculation for payback period**



	Existing system	SITECO solution	SITECO
<b>Luminaire type</b>	Conventional road luminaire	SL20	Refer...
<b>System configuration</b>			
Rated power [W]	83	11,4	
Luminaire luminous efficacy [lm/W]	48	135	
<b>Energy consumption</b>			
Energy consumption /year [kWh]	45,484	6,247	
Reduction in energy consumption	0 %	86 %	1,
<b>Investment costs</b>			
Investment costs [€]	0	45,210	
<b>Energy costs</b>			
Energy costs over system service life [€]	136,452	18,742	3
Energy cost saving	0 %	86 %	
<b>Maintenance costs</b>			
Maintenance costs over system service life [€]	33,077	18,175	
Maintenance cost savings	0%	45%	
<b>Total TCO total costs (investment costs + energy costs + maintenance costs)   Costs of Ownership (TCO)</b>			
Total costs over system service life [€]	169,529	82,127	4
Total cost saving	0 %	52 %	
Payback time in years	0	6.8	
CO <sub>2</sub> saving over system service life [t]	0	471	

TCO Calculator is an application of Siteco GmbH - Germany  
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Sustainability

# Flexibility

Quality of life

Those who  
are flexible have  
a relaxed view  
of the future.

One thing is certain: The future is digital – and that includes lighting. So it's not enough to consider light in isolation. It's part of a networked infrastructure and the basis for Smart City applications. And because today's dreams are already tomorrow's reality, it is all the more important to establish structures that are as flexible, open and future-proof as possible. An added factor is that no town, city or municipality is like the other.

**SITECO is your flexible partner.**





## From us to you: The right light for all applications.

The demands of our cities could not be greater: Technical lighting for traffic arteries, new interpretations of classic luminaires for residential areas, decorative solutions for city centers and tunnel lighting with maximum reliability. With its portfolio of outdoor luminaires, SITECO covers all applications from the village to the metropolis.

The small town of Pivka, Slovenia has made the most of the portfolio and project expertise of SITECO. In addition to a variety of different luminaires, an intelligent control system for night-time dimming was also installed. The result speaks for itself:

**80** %  
energy cost savings with

**1,200** light points across  
the entire  
municipal area



1 + 2

Project: Municipality of Pivka, Slovenia

Product: Streetlight SL 20, DL\*50, DL\*30, Floodlight FL 20



## Finally, a real added value of digitization.

Digitalization is not a technical gimmick. The objective is added value for communities and their citizens. Each community decides for itself the extent of digitization. SITECO provides the possibilities – from sensor-controlled on/off lighting to central tele-management and enhancement with new functions.

The foundation is the SITECO Smart Interface. Incorporating Zhaga standards, the luminaires are open for sensor and control technology as well as integration into third-party systems. Our LumIdent service enables the digital management of all lighting data.

The city of Kaiserslautern in Germany demonstrates what is already possible today. Temperature and humidity sensors provide ice warnings that are projected onto the sidewalk.

**100** %  
daily benefit  
for citizens



## Smart City – technological flexibility for your neighborhood.

Intelligent control creates potential: Lower power consumption and less light pollution due to controllable dimming and switch-off functions. More safety and protection from vandalism thanks to presence sensors. SITECO Connect offers tailor-made solutions: From plug-and-play motion sensors as autonomous control solution to fully connected telemanagement systems.

**SITECO Connect is your foundation for urban services of the future.**

## Data management must not be complicated.

LumIdent is our three-step solution for your inventory and system management that enables simple commissioning and administration of your luminaire infrastructure.

That means: Simple setting, diagnosis and management. This saves you time, ranging from commissioning the luminaires to taking stock of your inventory. Extensive diagnostic data support you in optimizing internal processes and streamlining workflows.



The LumIdent QR code enables fast identification of the luminaire and direct access to the technical data.

The LumIdent app allows you to view and adapt your luminaire profile at any time, digitize the inventory and diagnose errors.

The LumIdent Web Tool enables a unified overview via visualization and localization of the recorded luminaires, and data export compatible with your asset management system.



Sustainability  
Flexibility

# Quality of life

If it's good for people and the environment, it's attractive.

Whether citizens find their town or city attractive depends largely on its appearance. Good light creates atmosphere and is a part of effective city marketing. However, something is only attractive if it also conveys a feeling of safety and security. Light is once again crucial. With good visibility, there are fewer accidents. Bright areas allow no room for dark figures. The decisive factor here is the right application and quantity – because light pollution and energy waste must be avoided.

**SITECO – light from people for people.**

## We respond to increasing light pollution.

Light pollution and stray light can lead to glare, disturb the sleep of people and negatively influence the natural behavior of nocturnal animals. Our luminaires convert the light of high lumen-output LEDs into pleasantly diffuse, uniform light. The magic term is HD faceted reflector technology. Not only does this ensure maximum visual comfort without glare but it also directs light in a specifically targeted way onto the desired surface – light only where it is wanted. And, because of intelligent control, only when it is needed.

Thanks to new street lighting, the municipality of Balgheim saves 40 metric tons of CO<sub>2</sub> per year – and obtains significantly higher light quality at the same time:

Optimum lighting levels due to a SITECO solution with integrated night-time dimming.



## Light can be really good.

Your television isn't the only device that can do HD; SITECO luminaires can do, too. The high-definition faceted reflector in our road luminaires is the measure of all things for optimum light on your streets. And the globally unique silver coating process delivers even more efficiency.

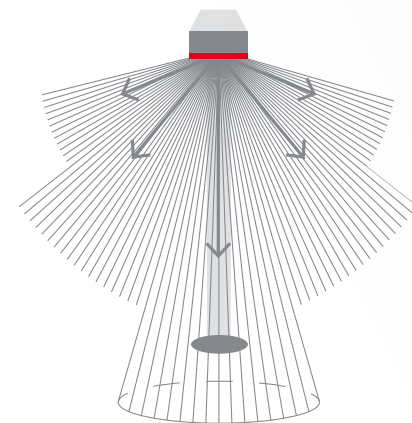
Crystal clear: Robust and permanently transparent PMMA cover.

HD-R reflector technology: A combination of faceted reflector and double-convex cover for maximum precision.

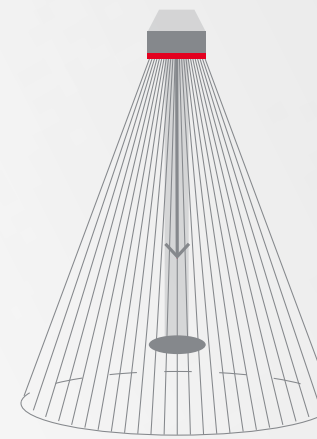
Excellent glare control: The light from high-power LEDs is resolved into soft, uniform light with maximum visual comfort.

100 % Dark Sky: 0 % light immission at 0 degree inclination.

High optical light output ratio due to silver coating.



Conventional street luminaires cause increased light pollution – adversely affecting the environment, adjacent areas and residents.



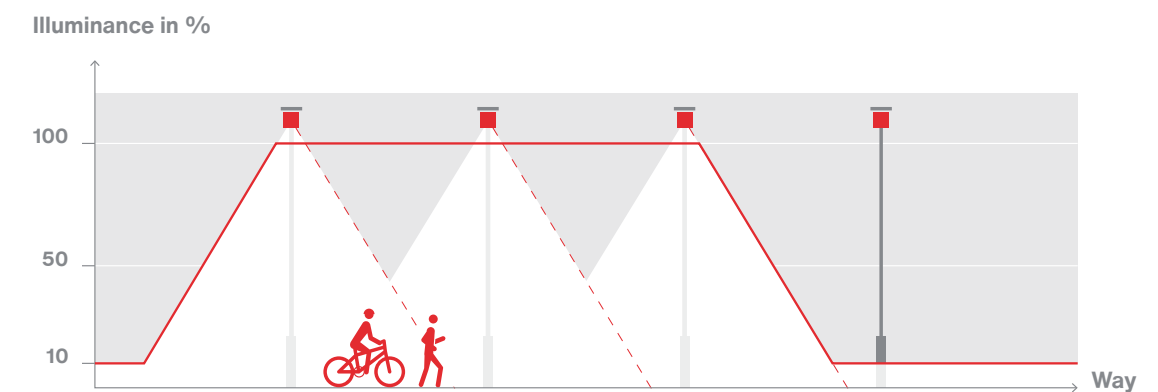
Our solutions minimize unnecessary light spill thanks to directed light from innovative optic concepts.



## Grateful for more safety.

Lighting doesn't have to be "always on." It makes more sense to use adaptive lighting with situation-related lighting scenarios: Little light if possible and more or high levels of light if required. SITECO lighting solutions with integrated sensor technology and open interfaces make this effortlessly possible. The situational lowering of illuminances during low-traffic periods saves energy and reduces light pollution. Where necessary, high illuminance levels provide the necessary level of safety. And all automatically thanks to intelligent control – on the sidewalk and in road traffic.

The Royal Holloway College in London thought this sounded good. The luminaires on their park-like campus are radio-based and controlled according to movement.



Situational light supports safety,  
environmental protection  
and cost efficiency.

## Let's combine tradition with progress.

It is not without reason that people refer to “city lights” when describing the special attraction of urban spaces. Decorative lighting lends cities their unmistakable character and their special flair.

In addition to technical street lighting, SITECO also offers a portfolio of decorative lighting solutions that complement the design of urban spaces – without compromises in terms of quality of light, efficiency, glare control and intelligent control options.

In the German town of Bensheim the familiar townscape remains intact following refurbishment of its old town lighting but efficiency reaches a new level:

**40** %  
less power consumption  
with an unchanged  
attractive townscape







# Lighting technology

We admit it,  
we love lighting  
technology.

SITECO is a technology pioneer with more than 150 years of experience. CLO 2.0, full cut-off, freeform reflector technology with a globally unique silver coating process. We stand for more than 200 patented lighting technologies with diverse application options for you and your future. We also offer you holistic luminaire development from a single source – from the optics, mechanics and thermal design right up to the control electronics. The perfect integration of hardware and software designed and engineered in Germany.

**SITECO stands for exceptional  
lighting technology.**

# Streetlight luminaire family

Especially durable thanks to robust diecast aluminum housing (IP66/IK09) with optimum heat dissipation, ensuring more than 90 % residual luminous flux after 100,000 hours of service life

Highly efficient LED technology and tool-free opening for quick maintenance of the luminaire for low operating costs

Digital interface for automatic communication when replacing ECGs or modules – no need for resetting or pre-parameterization

High flexibility due to several sizes and optics as well as various light colors and housing colors

Maximum visual comfort on the road: Precise, uniform and glare-free illumination via HD faceted reflectors with patented silver coating

Future-proof configuration thanks to various control options, intelligent dimming function, CLO 2.0 and open interfaces for Smart City applications, along with modular design for component upgrades



## Streetlight SL 11

**The undisputed top model in technical streetlighting.**

A modern design with outstanding light, efficient performance, reliable operation and intelligent control.



## Streetlight SL 20

**A smart concept for strong performance.**

The efficient multitalent with a well thought-out product concept – for a wide range of applications from cycle paths to multi-lane main roads.

- Sustainable module approach for easy replacement of the upper part of the luminaire as a complete module at the end of the long service life of 100,000 hours
- Precise illumination thanks to innovative lighting technology based on PMMA lenses and a wide range of different light colours and distributions – also suitable for customer-specific versions
- Sights set on the future: State-of-the-art lighting control and wireless networking through optional Zhaga interface as the basis for future Smart City applications

## Streetlight SL 30

**Pragmatic, efficient, well thought out.**

The practical solution for modern street lighting from residential areas to motorways.

- Durable and robust: Stable die-cast aluminium housing (IK09) with optional double coating and easy to clean ESG glass
- Simple and sustainable design for quick installation and secure ECG replacement
- Four sizes for relevant main applications in all lighting classes and different light colours for different design approaches

## Streetlight SL 40

**The uncomplicated partner for technical street lighting.**

Cost effective but yet durable and efficient solution for comprehensive light infrastructures in cities and towns.

- Three sizes, a standard light distribution and programmable lumen packages for appropriate flexibility
- Designed for efficiency in all areas: Uncomplicated assembly and installation, cost-effective operation, uncomplicated storage
- Autonomous dimming and AstroDIM function with an easily programmable preset during commissioning





## Urban luminaires with Module 540

### Modular into the future of city lighting.

One for all – a single module for a diverse spectrum of applications, both efficient and elegant. With innovative LED technology for high visual comfort and decorative light control for high acceptance levels with the general public.

A wide range of options for illuminating urban spaces: Maximum compatibility enables selection from an attractive luminaire portfolio and significantly simplifies maintenance

- 1 Mushroom luminaire
- 2 Lantern Classic

- 3 Lantern Deluxe
- 4 City-Light Elegance

- 5 City-Light Plus
- 6 City-Light Pillar

- 7 Litepole
- 8 Litepole 2

Easy installation and low maintenance future-oriented modular design for exchangeable LED module and gear tray

Luminous module body as a visual guidance element with decorative day/night time effect

Low energy consumption due to high luminous efficacy and avoidance of overplanning due to patented CLO 2.0 luminous flux tracking

High visual comfort due to uniform illumination and very good glare control – can be further increased with spreader element





## DL<sup>®</sup> 20

**The design benchmark among road luminaires.**

- Precise light distribution due to double reflector technology in MIRO<sup>®</sup> quality for different road and plaza situations, and optimum glare control – allowing even a glare-free view into the luminaire
- Filigree design with resistant workmanship (IP66, IK08), dirt-resistant toughened safety glass and low-maintenance continuous operation of up to 100,000 hours with minimum luminous flux degradation thanks to optimal thermal management

## DL<sup>®</sup> 30

**Fresh urban aesthetics.**

- Decorative post-top luminaire for good quality of light and visual comfort in residential and urban areas – also available with 270° optic specifically developed for intersections
- Modern lighting technology with specific light distributions, for glare-free light with constant lighting quality and efficiency thanks to high-quality specular reflectors and permanently clear PMMA cover

## DL<sup>®</sup> 50

**The urban all-rounder.**

- Decorative technical solution available as mast and catenary variants and in two construction sizes for all urban applications with a modular design saving time and resources
- Precise, glare-free light via HD faceted reflector and precisely defined light distributions for high visual comfort and safety



Project: Siemens Flow Goods  
Sonderborg, Denmark  
Product: DL<sup>®</sup> 20



## Floodlight FL 20

**The highly efficient all-purpose solution for sports and area lighting.**

- Long service life of up to 100,000 hours and extremely resilient due to non-yellowing glass cover, PMMA lens material as well as exchangeable ECG and LED modules
- Needs-oriented, flexible lighting solution with four different sizes and a variety of photometric configurations
- Sustainability for your football training ground – obsolete systems can be immediately upgraded with eight floodlights according to DIN EN 12193 Class III

## Bell

**Classic style with state-of-the-art LED technology.**

- Classic form with innovative interior including HD faceted reflector for precise, glare-free light distribution and intelligent operating technology such as CLO 2.0
- Flexible solution in two sizes, available both as complete luminaire and as an LED module for refurbishing existing Bell luminaires to benefit from energy-saving potential of up to 80 %





Project: Kaisermühlentunnel Vienna, Austria  
Product: Tunnellight TL 23

## Tunnellight TL 13

### The undisputed top model of tunnel lighting.

- Continuous row luminaire with innovative, extremely compact design manufactured for challenging mounting situations and made of high quality stainless steel with extremely low decline in luminous flux for a long service life and low maintenance costs
- Very uniform illumination ( $UI > 0.9$ ) for high visual comfort and thus traffic safety



## Tunnellight TL 23

### The efficient multi-talent among tunnel luminaires.

- Linear compact luminaire with outstanding efficiency of over 185 lm/W for low operating costs – simply controllable via 10StepDim or DALI and thus highly compatible with various control systems
- Robust construction meeting the requirements of automatic tunnel cleaning machines for maximum reliability



## Tunnellight TL 33

### The intelligently designed tunnel luminaire

- LED luminaire with over 40 % more light compared to a luminaire equipped with 400 W high-pressure sodium vapor discharge lamp for simple energy savings – environmental protection that quickly pays for itself
- Compact housing allows greater flexibility with regard to overhead clearance heights – crucial for refurbishment projects



## Adaption.

### Modification of series luminaires

- Changing the light color and color rendering
- Changing the housing dimensions, colors and mounting devices

## Combination.

### Modular construction system

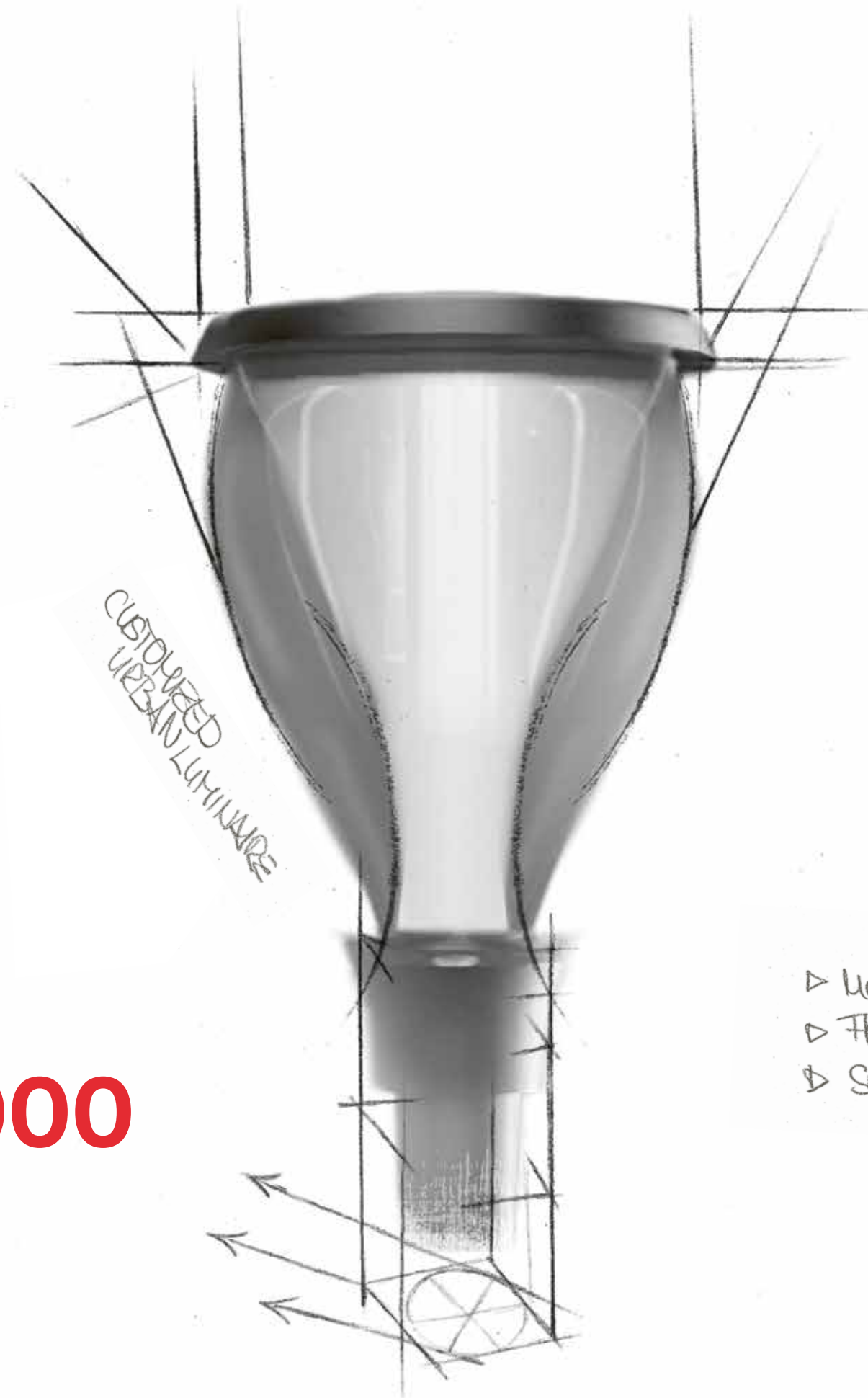
- Versatile combinable systems for your ideal project solution
- Modular SITECO optic platforms as the basis for your project luminaire

## Creation.

### Special luminaire development

- Concept development and project management
- Construction planning and special luminaire construction with an experienced development team

**800,000**  
customized  
luminaires  
in over 1,000 projects



## Ideal customer proximity via flexibility and speed.

When the options in the catalogue end, the almost infinite variety of customized options begin.

SITECO offers a wide spectrum of customized solutions thanks to its experienced team of designers and engineers. *Made in Germany* also means we provide additional flexibility and speed.

- ▷ Modular concept for individual appearance
- ▷ Flexible adaptation of light effect
- ▷ Sensoric control components in aesthetic design



# Lighting solutions

One of many topics for you, but for us it's everything.

Outstanding lighting technology provides the perfect foundation. In addition, our claim is to also make a significant contribution to the future viability of our customers.

For this reason SITECO solutions include the complete spectrum of services, ranging from planning and project management to the financing and operation of your system.

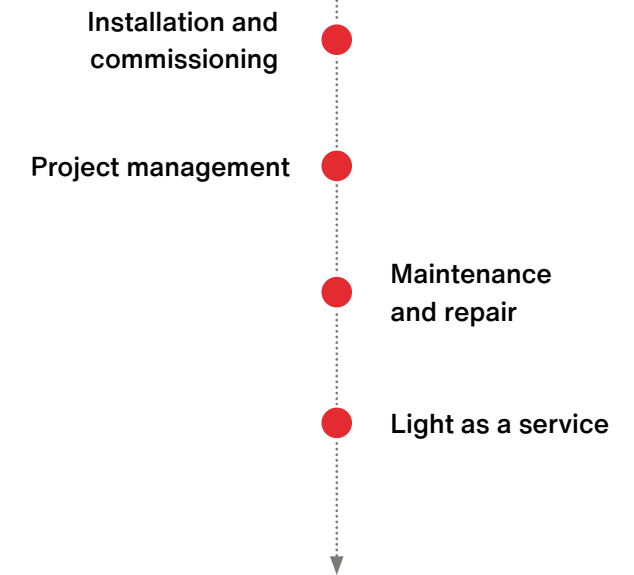
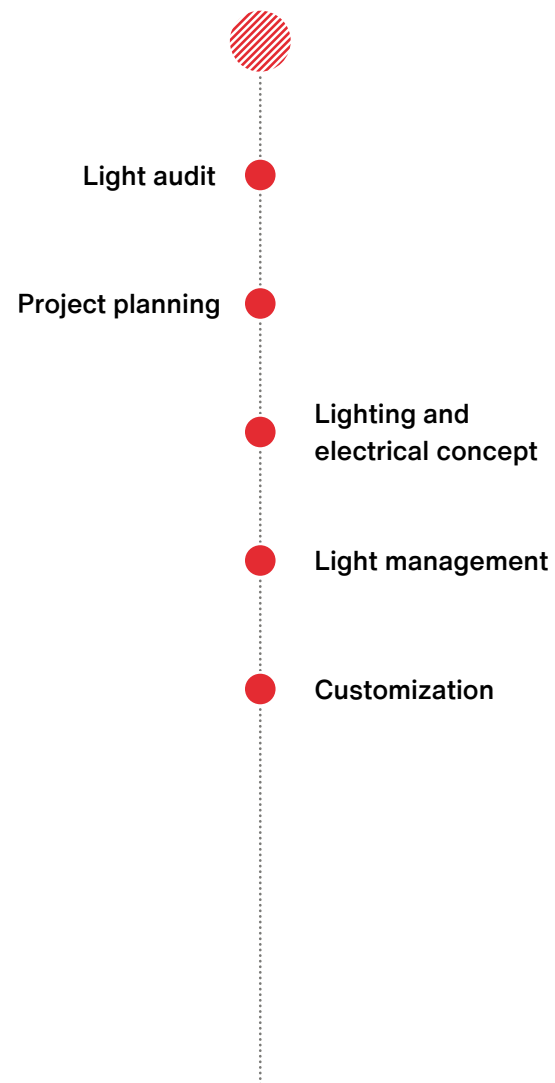
**SITECO takes responsibility for your light.**



# Complex is fine. But not complicated.

Whether functional lighting or complex lighting solutions – each project is individual and depends on the lighting requirements, the existing conditions and the architectural demands. SITECO supports you in defining these parameters and converting them into an overall concept. We also speak your language – putting complex technologies into plain words. This is how we make sure that your specific requirements are taken into account and successfully implemented in the project.

**SITECO – the planning and development partner for your lighting solution.**



# Your time and your budget are not infinite.

Modern lighting systems not only require precise planning but also precise implementation. This often results in high organizational and coordination effort – which should not result in a decision against the project. Concerns about high investment costs should also not hinder project progress. The systematic modernization of lighting systems usually pays for itself through lower operating costs.

We have a network of reliable partners ranging from installers to programmers to provide you with turnkey solutions. We also offer you individual financing solutions, for example monthly installments or individual leasing contracts. You decide whether CAPEX or OPEX and whether we take over your maintenance at the same time.

**SITECO guarantees the success of your project.**

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For reasons of readability, the brochure largely dispenses from using gender-specific formulations.

If personal designations are only provided in masculine form they refer to persons of every gender.

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