

siteco

# Light for a better environment. Acting sustainably is about more than just saving energy.

An initiative for the future: Lighting solutions from SITECO.

- "Green" light: Insect friendly, 100 % dark sky
- Modular product concepts with exchangeable and recyclable components
- Targeted, needs-based light for greater well-being among people and animals
- Luminaires for the whole city with significant energy and CO<sub>2</sub> savings

## **Environmental and species conservation**

Environmental protection can't remain an empty promise. This is why we also consider our environment when we develop our luminaires.

#### **Light emission**

Light only where and in the amount that's really needed. Targeted light control and intelligent activation of our lighting help ensure that light doesn't get wasted.

## **Energy** and CO<sub>2</sub>

Long-term conservation of resources:
Our innovative, highly efficient solutions
help us make a sustainable contribution to achieving climate targets
and reducing up to 90 % of CO<sub>2</sub>.

## Modular products and recycling

Our key building block in actively protecting the environment: We focus on the reusability and interchangeability of LED modules and ECGs. This generally makes it possible for 90 % of the material to be reused in in the life of anew luminaire.

# Sustainable. Through and through.

For the sake of our children, we as a society must manage available resources responsibly. More than ever, long-term investments in the future are necessary – and feasible.

To save energy and CO<sub>2</sub>, many municipalities have already converted their public lighting to LED. But is that enough? Lawmakers want more: More dark sky, more environmental and species conservation, more circular economy and intelligent recycling. Your partner SITECO is happy to say that we're already taking all this into account today.

SITECO considers sustainability in all dimensions.



### Habitats for insects.

For people, light means safety and well-being. But what's good for city dwellers doesn't automatically have to be bad for nature and animal life. Environmental and species conservation plays a central role in the technology driving SITECO's lighting solutions. They balance the needs on both sides.

control

High protection ratings

SITECO outdoor
luminaires feature
protection classes ≥ IP65.
Insects don't stand a
chance of getting inside
the luminaires.

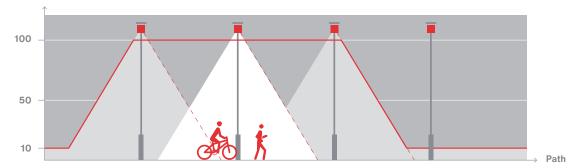
SITECO luminaires can be dimmed, activated and controlled as needed. This minimizes the impact of artificial light on the natural behavior of animals. This approach has already been specified in DIN EN 13201.

Targeted lighting

Warm light colors

SITECO also offers light colors with 2.200 and 3.000 Kelvin. Because: The warmer the light color, the the less it attracts nocturnal insects.

Illuminance in %



Light in motion makes a difference.

To protect animals and plants, the light switches on like magic for vehicles, cyclists and pedestrians.





CITECO Offers

Local planning adapted to the actual traffic situation

Low mast heights
and the lowest possible
DIN lighting classes
reduce the light intensity.
SITECO helps you determine
the right dimensions and avoid
overplanning equipment.

Light emission 0 %

GITECO offers.

**Glare control** 

Glare that bothers

both people and animals is avoided in SITECO luminaires by using such optical accessories as special covers, including back-light control and optics (full cutoff luminaires) – a proven solution, for example in residential areas.

The goal is clear: 0 % light in the upper atmosphere. And that's exactly what SITECO outdoor luminaires achieve. Their lighting technology enables them to illuminate streets and areas with exceptional precision – no tilting, no scattered light (ULOR 0 % for technical luminaires, < 3 % for individual decorative solutions).



## For a dark night sky.

Light pollution and scattered light have negative consequences: Both can create glare, illuminate the night sky, disturb people in their sleep and disrupt animals in their behavior. All the while, light emission can be completely avoided.

SITECO luminaires have always featured exceptionally precise light distribution coupled with modern control equipment. The result: Light only where and when it's wanted.

## ορτicalight®

Nanoprecise lighting for facades

Attractive facade lighting creates an appealing aesthetic for the nighttime cityscape, lending it an unmistakable character.

Working in partnership with opticalight, SITECO completes nanoprecise modeling of city properties with no scattered light.









SITECO offers.

Convenient separation of the main components

SITECO luminaires'
main components are
neither bonded nor fastened
with screws. They can be easily
separated and returned to the
material cycles – also because
all materials are fully
documented.

CITECO offers

Environmentally friendly production and packaging SITECO offers

Repair rather than discard

LED modules, drivers, seals and covers can be easily exchanged and, in some cases, this can even be done without tools. This means repairs and upgrades are done in no time at all. SITECO is not a disposable light.

From the
die-cast aluminum
housing to the latest
generations of LEDs that
feature specially developed
lighting technology: Everything
about SITECO luminaires is
designed with long-lasting
operation and significant
CO<sub>2</sub> savings in mind.

Sustainable operation

environmental protection
guidelines for its production
operations in Germany. That
means: No long transport routes
that stretch halfway around the
globe and packaging that uses
as little plastic as possible.

Circular economy implemented honestly.

Is a product sustainable because it uses less energy? No, production and disposal also have to be included in the calculation. That's why we manufacture our SITECO outdoor luminaires in Germany following energy-optimized manufacturing practices that employ a sophisticated modular concept with exceptionally high recycling rates for a true circular economy. For us, this all means *Made in Germany*.



# From conventional to LED: The great leap.

LED technology is nothing new today, nevertheless a huge number of conventional luminaires can still be found in many locations. Switching to LED lighting delivers maximum savings as well as all control options and digital functions from SITECO. An it's practical, too: In many cases, a substantial portion of the luminaire infrastructure is preserved.

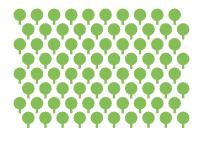
- Low operating costs and short amortization period thanks to maximum energy efficiency
- Customer-specific lighting control enables additional savings potential as well as a significant reduction in unnecessary light for the well-being of people and animals



Saving one ton of



... is equivalent to reforesting with 80 trees.





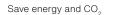






90 % of the luminaires remain on the mast

insectfriendly
light color



15



# From LED to LED: Update for your light

Not all LEDs are the same. A lot has happened. And lawmakers expect increasingly more than just inexpensive operation. With our modular luminaires, just a few simple steps are needed to exchange the LED module and ECG.

The result: Even more efficient light and, for example, a new insect-friendly light color.

# Our "green" outdoor luminaires



#### **Environmental and species conservation**

- Devoid of UV and IR radiation
- High protection ratings
- · Warm light colors
- Low temperature development
- · Light control and intensity
- Targeted lighting control



#### **Light emission**

- Light intensity and planning
- Light technology and inclination
- Light colors



#### Modular products and recycling

- Connections neither bonded nor fastened with screws
- Complete material transparency
- Easy return to the material life cycle
- LED modules, drivers, seals and covers can be easily exchanged
- · Basis for quick repairs and upgrades
- Durable die-cast aluminum housing
- LED technology is exceptionally efficient and offers significant CO<sub>2</sub> savings
- Made in Germany
- Production follows environmental protection guidelines





The new generation of SITECO outdoor luminaires with iQ: A quantum leap for environmentally friendly lighting.

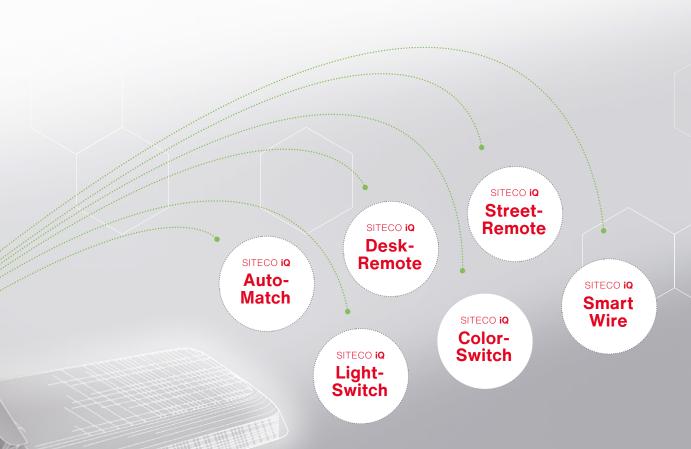
SITECO iQ delivers the luminaire of the future right here and right now: It comes loaded with comprehensive control and diagnostic options.

SITECO iQ brings sustainable digitalization to life. Experience the compelling functions of this nervous system along with its data paths.

Your lighting: It points to the future of urban design.



SITECO iQ



- Environmentally friendly: Luminaire made of recyclable materials, ECG and LED module exchangeable
- Highly recyclable: ECG and LED module neither glued nor encapsulated, making it easy to disassemble into individual components all the way to separating plastics by type
- Resource-conserving: Configuration on the mast can be done without using cherry pickers
- Sustainable and environmentally friendly:
  Intelligent functions (Light-Switch, Color-Switch,
  Smart Wire, CLO2.0, Night Set) make it possible
  to use light sensibly
- Weighs less (several 100 grams): Not encapsulating the ECG reduces transport weight and, as a result, lowers fuel consumption when transporting
- Has a smaller CO<sub>2</sub> footprint: Because ECGs and modules are produced in Europe, transport distances are shorter

# We're shaping the light and the sustainable infrastructure of the future.

The areas we're working on to help shape the future of tomorrow:

Continuous efficiency updates to LED luminaires and modules

Implementing smart software solutions in ECGs in order to reduce consumption New environmenta packaging concepts Energy management: Optimizing our company's interna consumption (water, energy)

Natural design or our company site

Flexible
arrangements to
work from home
mean less commuter traffic

Work bike: Support for environmentally friendly work commutes

## Contact.

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