



LIGHT FOR THE FUTURE

GREEN BALANCE

REGIONALLY ROOTED, GLOBALLY BRANCHED

**Sustainability, energy efficiency and climate protection:
Positioning potential for LED lighting**

SUSTAINABILITY AT BILTON LEDON Technology

AT A GLANCE

BILTON LEDON Technology is the specialist with high competent specialist in linear LED lighting. With its range of modular products, the company based in Saalfelden (Austria) offers the right product for every customer requirement. Since 2009, BILTON LEDON Technology has been the full-range supplier for high-quality and durable linear LED solutions and intelligent lighting management systems. Today, BILTON LEDON Technology is leader of innovation on the market and produces and develops in Austria.

At BILTON LEDON Technology, the following criteria are constantly developed and improved to always achieve the best result for sustainability:



EFFICIENCY

BILTON LEDON Technology develops electrical designs that ensure the highest possible efficiency. For this purpose, only LEDs of the highest state of the art are installed



LIFETIME

For BILTON LEDON Technology, the focus is already on a long service life during development. This is the basis for the generation of resource-saving LED lighting:

// Only LM80 tested LEDs are used

// Integrated temperature monitoring protects the LED light strips from overheating

// Coatings and potting guarantee protection against external influences



UP TO 10 YEARS WARRANTY

The products at BILTON LEDON Technology are designed for a long life. One effect of this is up to 5-year warranty on the products developed and produced by BILTON LEDON Technology



MADE IN AUSTRIA

„Made in Austria“ is not just a slogan, it is the company's mission statement and self-image. BILTON LEDON Technology lives, develops and produces accordingly



INNOVATION LEADER

The lighting industry is very fast-moving, and BILTON LEDON Technology is well aware of this. Accordingly, the company relies on an innovative and efficient product portfolio



CERTIFICATIONS

Products as well as internal processes are certified at BILTON LEDON Technology - with all required as well as numerous voluntary certifications that are important for a standardized and sustainable company (ISO, UL, ENEC, etc.)



100 % ADDED VALUE FROM AUSTRIA

BILTON LEDON Technology pursues a strategy of 100% value creation. The careful use of resources is a central approach to corporate management



DELIVERY BY RAIL

At BILTON LEDON Technology, 80 percent of the materials that do not originate in Europe are delivered by rail in order to keep the CO2 burden as low as possible

MODERN LIGHT FOR MORE SUSTAINABILITY

One thing quickly becomes apparent in the climate protection debate: even better than alternative energy is the energy that is not consumed. Therefore, there is great potential in efficient lighting technology. Investments in modern LED lighting are worthwhile: they conserve natural resources, are partially recyclable and save costs.

Sustainable lighting must meet a number of requirements: BILTON LEDON Technology offers lighting systems from a single source – all products are coordinated with each other, thus the best result can be achieved, both for the environment and for well-being.

The BILTON LEDON Technology’s product portfolio offers:

- // Everything from a single source –
- // developed by a specialist –
- // produced in Austria –
- // user-friendly handling to ensure effective use of the latest lighting technology –
- // with efficient and long-lasting light sources

These benefits combined together have resulted in the fact that the company BILTON LEDON Technology was founded. The declared goal of BILTON LEDON Technology is to constantly develop LED lighting and integrate it into all areas of life.

REGIONALLY ROOTED, GLOBALLY BRANCHED

Sustainability combines: Economy and environmental compatibility. BILTON LEDON Technology products combine maximum economic comfort with minimum energy and resource requirements.

The result: a unique balance – BILTON LEDON Technology Green Balance. BILTON LEDON Technology develops lighting and lighting control solutions that consume more than a third less energy than conventional lighting. With higher efficiency and longer service life. In this way, the high-quality raw materials of our earth are used in a controlled and careful manner. The label “Made in Austria” guarantees regional added value and avoids long transport routes. This environmental awareness runs through all areas of BILTON LEDON Technology. For the company, innovative technologies and designs also mean ecological responsibility, sustainable management and social action.

SUSTAINABILITY:

Green light for the Future

Modern lighting systems consume little energy and reduce the burden on the environment. Truly sustainable lighting technology can do even more: It is convincing with good eco-balances, saves costs and ensures a better quality of life.

While sustainability above all meant environmental protection, today truly sustainable activity also takes economic and social issues into account. Modern lighting technology makes a valuable contribution to these aspects.

- Efficient light sources,
- optimized luminaires and
- electronic control

conserve natural resources, are largely recyclable and save costs. At the same time, they make visual tasks easier and promote people’s well-being, for example with Human Centric Lighting (HCL) concepts. A lighting control system ensures that light is only switched on when it is needed.

Aspects of sustainable lighting

ENVIRONMENT	ENVIRONMENT	Nature conservation	SUSTAINABILITY	SUSTAINABLE LIGHTING	Energy efficiency
		Climate protection			Avoidance of light immissions
		Resources protection			Sheep matter limitation Recycling
ECONOMY	ECONOMY	Capital	PEOPLE	PEOPLE	low power costs
		Profitability			long service life low maintenance
		Value preservation			better productivity due to better light
PEOPLE	PEOPLE	Health	PEOPLE	PEOPLE	high quality of light
		Safety			high ease of use
		Quality of life			more well-being light according to requirements

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SUSTAINABILITY FOR BILTON LEDON Technology LED PRODUCTS

The following criteria are constantly developed and improved to always achieve the best result for sustainability for the products:

EFFICIENCY

- // Use of branded LEDs that are always at the cutting edge of technology.
- // Electrical design that allows the highest possible efficiency

LIFETIME

- // Exclusively LM80 tested LEDs with a test duration of 10 kh – this results in an extrapolation of the service life to 60 kh.
- // Coatings and potting guarantee long lifetime depending on application
- // Integrated temperature monitoring to protect against overheating

CERTIFICATIONS

- // ISO 9001: certification helps to reduce defect rates and thus save resources and energy

INTERACTION OF THE PRODUCTS

- // At BILTON LEDON Technology, all products are coordinated with each other to develop efficient lighting systems.

USER FRIENDLY HANDLING

- // In order to ensure effective use of modern lighting technology

100% VALUE ADDED IN AUSTRIA

5 YEARS WARRANTY



SUSTAINABILITY FOR BILTON LEDON Technology LED PROJECTS

The following criteria are constantly being developed and improved to always achieve the best result for sustainability in the projects:

LIGHTING CALCULATIONS AND PROJECT MANAGEMENT

- // As a specialist, BILTON LEDON Technology can help customers to find and implement the best lighting system.

PERMANENT INNOVATIONS

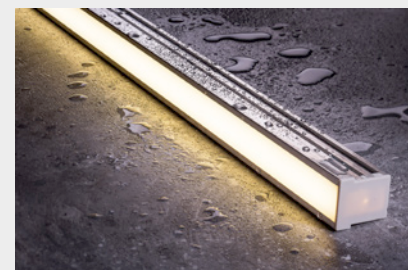
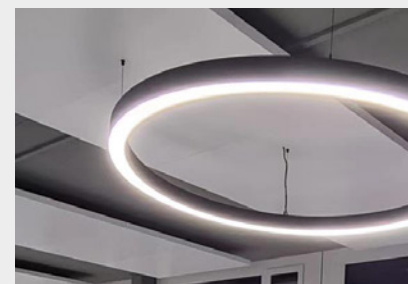
- // BILTON LEDON Technology always remains at the cutting edge of technology. In addition to the further development of the existing range, new products are also constantly being developed



COMPARISON

LED vs. conventional lighting

FLUORESCENT LAMPS	LED LIGHTING
// Glass bulb production very energy-intensive (>1000°C) / CO2 certificates mandatory for operation	// Semiconductor production is energy-intensive / But not to be compared with a glass furnace
// Lamp production equally energy intensive (vacuum, melting of the bulb ends,...)	// Forward integration to LED no significant energy required
// High demand for luminescent materials / Extraction from rare earths - very dirty technologies	// Clean room necessary - no intensive heat treatment required
// Fragile goods increase transport volume/ transport logistics	// After their service life, LEDs are common electronic waste
// Disposal extremely problematic: / Mercury / heavy metals from the electrodes / Separation from glass	



ECOLOGICAL ADVANTAGES

of LEDs in operation

- // Massive energy savings of 60 % and more depending on use
- // Optimize energy requirements LEDs can be easily controlled and dimmed to precisely match demand
- // Lifetime factor for LEDs is three to five times longer
- // Due to the long service life, LED lighting is practically maintenance-free (no need for regular replacement of illuminants)
- // Qualitatively better light - has a positive effect on the environment

ECONOMIC EFFECTS

from LED lighting

- // Lower running costs due to:
 - / reduced energy consumption
 - / lower maintenance costs
 - / longer service life
- // Reduced administration costs due to long service life No need to keep spare lamps on hand and no need to organize maintenance
- // Future-oriented Expected additional savings in energy consumption due to:
 - / rising energy costs
 - / CO2 tax from 2023 and increasing annually
- // As of 09/2023, sales ban on T8 tubes
 - / Could lead to shortages and inflated prices
 - / Earlier replacement of lighting recommended

COMPARISON

LED vs. conventional lighting

Is it worth replacing an existing fluorescent system with an LED system?

AMORTIZATION CALCULATION			
	Existing Fluorescent plant	New LED system	
	1,000 pc. 2-flame T8 lights (126 W each)	1,000 pcs. LED light with 45 W (with improved light output)	Amortization
Acquisition costs	existing / will be exchanged	Bulbs € 109,000 including assembly € 54,000	Total investment € 163,000
Electricity consumption per year in kWh 60 h / week	393,120 kWh	140,400 kWh	252,720 kWh
Electricity savings in Euro (0.18 € / kWh)	98,280 €	35,100 €	63,180 €
Maintenance savings per year	Maintenance costs: approx. 1.872 €	–	Maintenance costs: approx. 1.872 €
Average Lifetime	6.4 years	16 years	longer lifetime 9.6 years
CO₂ savings		83,400 kg/years	
Total cost savings per year			65,052 €
Total savings in 45,000 hours including maintenance (16 years)	1,602,432 €	561,600 €	1,040,832 €
AMORTIZATION			2,5 YEARS

The purchase of a new LED system with the same light intensity pays for itself after 2.5 years (including replacement costs and increased light intensity). Or calculated over the service life of the LED system of 16 years, you save 63,180 € or 252,720 kWh in energy costs annually. The expected rising energy prices and the new CO2 tax are not yet included here.

(Higher electricity costs or longer service life shorten the payback period). This invoice is for illustration only. Prices may vary according to type, assembly and price changes.



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