



**PHILIPS**

Börderland, Germany

Public lighting

# Safe, attractive and efficient lighting on the streets of Börderland

By creating more attractive and livable spaces, the municipality of Börderland in Germany wanted to increase the comfort and well-being of its existing residents, and encourage younger generations to move into the area. The conversion to LED enabled the municipality to deliver comfortable lighting that is easy on the eyes of residents, and to achieve significant cost savings and sustainability benefits.

“Our main goal is to make the municipality an attractive place for all generations to live – now and in the future. We see lighting as one of the key enablers to achieve this.

**By using a new, modern LED lighting concept we want to give citizens a sense of security and appreciation.”**

Bernd Nimmich, Mayor of Börderland

## The need for order and consistency

When seven districts fused in 2007 to create the municipality of Börderland, there was no overall, uniform lighting infrastructure. Each district was using different streetlights from different providers – even based on different technologies. This resulted in a lighting infrastructure that was outdated, haphazard, inefficient and difficult to maintain.

The primary objectives of the lighting renovation project were to create a more livable space for existing and future inhabitants through comfortable and gentle light experiences, significantly reduce energy consumption, and improve sustainability. The mayor wanted to achieve all these through the design and implementation of a new, simpler and more standardized lighting concept. To keep the initial investment costs low, a further requirement was to retain the existing pole spacing.

## From assessment to specification

To reach its objectives, the municipality consulted with its lighting expert, Avacon Netz GmbH. Avacon classified several zones within the municipality based on their function, such as major highways, residential roads, pedestrian areas and cycle paths, and assessed the lighting needs of each zone.

Based on the data collected during the assessment, Avacon prepared an economically attractive renovation concept. It incorporated products from Philips Lighting, as those were able to meet all the varied requirements. To get sufficient funding for the project, it had earlier been identified that the new lighting solution needed to deliver savings of at least 70% compared to the previous installation. As the calculations confirmed that savings would be above that level, funding was obtained from a number of sources, and the project was signed off for implementation.

## A lighting system for decades to come

The municipality obviously wanted their new lighting system to last for a long time. This was ensured by selecting an LED-based system. A major advantage of LEDs is their long service life of around 25 years in streetlight applications. To further reduce the burden of maintenance on the municipality, only two luminaire ranges were selected: Philips Luma and CityCharm.

“We have already started enjoying the benefits of decreased energy consumption, and have realized energy savings of around 76%, which benefits us and the environment.

Thanks to the very gentle and more subtle lighting installed in residential areas, we notice that residents now feel more comfortable spending time outside during evening hours.”

Georg Skorsetz, Head of the Bördeland Construction Department

## Increased comfort for residents and visitors

The clean, high quality light produced by the combination of Luma and CityCharm luminaires provides high visibility on all streets, increasing the sense of safety for road users, cyclists and pedestrians. At the same time, CityCharm with its GentleBeam optical platform delivers light which is subtle and free from dazzle, with hardly any impact on efficiency of the installation. This improves the attractiveness of residential areas. As proof, residents along minor roads have remarked that they feel more at ease to go for an evening walk, because the footpaths are very clearly illuminated. They also appreciate that light from streetlights no longer comes through their windows at night, leading to a more comfortable living environment.



### Increased comfort

The new lighting system has turned Bördeland into a more welcoming space. Lighting in the residential areas is now more gentle on the eye and is not a nuisance during the evenings.



### Significant savings in energy and maintenance

The new LED lighting enables energy savings of 76%. Furthermore, using just two LED luminaire families across the whole municipality reduced the complexity of ordering, installation and maintenance operations.



### Sustainable solution for a better tomorrow

Thanks to controlled distribution, light is delivered only where it is required, minimizing light waste and reducing light pollution. Moreover, the new solution leads to a reduction of CO<sub>2</sub> emissions of 193.5 tons per year.

## About Bördeland

The municipality of Bördeland in Germany was created in 2007 through the fusion of seven districts: Biere, Eggersdorf, Eickendorf, Großmühlingen, Kleinmühlingen, Welsleben and Zens. Bördeland is keen to modernize its infrastructure, attract and retain citizens, and promote economic growth. Renovation of its street lighting plays a major role in its transformation.

## Fast facts

**Customer:** Municipality of Bördeland

**Installer:** Avacon Netz GmbH

**Location:** Bördeland, Germany

**Systems & products:** Philips CityCharm with GentleBeam optical system, Philips Luma

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