## PHILIPS

Ameland, the Netherlands

Urban lighting



# Creating a more pleasant, livable space **both for residents and wildlife**

**66** Lighting spectrums specially designed for nature conservation are key components to maintain the ecological balance on Ameland and offshore."

Luc van Tiggelen, Sustainability Project Manager, Ameland

The picturesque island of Ameland, off the north coast of the Netherlands, has implemented responsible and sustainable lighting to ensure the comfort of residents and visitors. At the same time, the lighting protects the island's valuable and delicate ecosystem by creating a livable space for wildlife and avoiding light disturbance to migrating birds.

#### **66** An essential part of sustainability proved to be a future-proof solution for public lighting. Future-proof lighting should not only be energy efficient. It must also provide room for effective raw material

use, and for reuse and recycling. That is important for the conservation of ecological systems on Ameland.'

Luc van Tiggelen, Sustainability Project Manager, Ameland

#### The vision of a Sustainable Ameland

The vision of the municipality of Ameland is built around sustainability, incorporating a future based on a CO<sub>2</sub> neutral, ecologically responsible energy supply. To achieve this vision, in 2007 the municipality established the Covenant of Sustainable Ameland. Within this consortium, the municipality is consulting and working together with a number of companies to deliver solutions that support the conservation of Ameland's wildlife and provide comfort to its residents.

#### **66** Energy-efficient lighting is a key component of our sustainability strategy. So we asked Signify, a covenant partner of Sustainable Ameland, to replace our public street lighting with sustainable LED lighting."

Albert de Hoop, Mayor of Ameland

#### **Optimal comfort for residents** and visitors

In the residential areas of Ameland, the focus was obviously on comfort and safety, both for locals and tourists. A further requirement was that the municipality wanted to retain the existing historical luminaires in the town centers.

#### **Ensuring undisturbed** bird migration

Field research conducted over the North Sea shows that artificial public lighting can disturb the rhythms of nature. Specifically, it proved that migrating birds can be disoriented by the lighting on drilling platforms in the North Sea, often leading to fatalities. To combat this effect, we developed a dedicated bird-friendly light recipe. As it lacks the part of the spectrum that affects the behavior of migrating birds, it does not attract them. This light recipe was implemented both outside the built-up areas of Ameland, and off the coast, to avoid disturbing birds at night-time or during migration.

## Using no more light than is necessary

The UrbanStar luminaires at the beach entrances are equipped with LumiMotion control. LumiMotion detects the movement of people and larger animals - triggering an increase in light intensity - while disregarding the motion of smaller animals and birds. By using this light-on-demand solution, Ameland protects its nature by minimizing light disturbance during the night, and also achieves higher energy savings.

All luminaires on the island are connected to the Interact City lighting management software. This allows the municipality to manage, monitor and measure their light remotely.

#### **Appreciated by residents**

Ameland residents have expressed delight at the new lighting solution. The reduced light pollution enables them to see more stars at night. At the same time the new lighting offers a sense of visibility and comfort. The residents also welcome the municipality's sustainability efforts. \_\_\_\_\_



#### **Conservation of nature**

The specially designed light spectrum for birds combined with LumiMotion control have reduced light pollution and minimized light disturbance to birds.



In the residential streets, comfortable light that is easy on the eye is enabled by the GentleBeam optical solution.



#### A sustainable Ameland

Ameland's overall lighting solution provides a good foundation for a sustainable, CO<sub>2</sub> neutral future concept.

### Increased energy efficiency and optimized control

The use of LED lighting has significantly cut energy consumption, while Interact software enables remote management of light points for further savings in terms of energy and maintenance.

#### **About Ameland**

Ameland is one of the West Frisian Islands off the Customer: Municipality of Ameland north coast of the Netherlands. Its population of nearly **Location:** Ameland, The Netherlands 3700 is augmented in the tourist season by visitors keen to explore its historic villages, natural areas with Lighting Products: Philips CityCharm Philips Cordoba outstanding flora and fauna, and its beautiful beaches. with GentleBeam technology, UrbanStar, Iridium, Preserving the island's delicate ecosystem is high Dedicated light recipe for birds, LumiMotion control among Ameland's priorities.

#### To find out more about Philips LED lighting for urban spaces visit www.philips.com/urbaninspiration



### **Fast facts**

Remote lighting management enabled by Interact City



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