

# TVILIGHT



## Case Study

### Safe, Energy-Efficient & Eco-Friendly University Campus

Twilight's adaptive street lighting system at Royal Holloway, University of London creates a safer, greener, and more productive setting for students, faculty, and staff.

# Challenge

**Enhance safety and comfort**

**Achieve energy efficiency**

As UK's one of the top 25 universities, Royal Holloway, University of London, has over 10,000 students from over 100 countries. In order to improve the safety perception and comfort of everyone traversing through the common tree-lined paths – connecting lecture halls, canteen, and student accommodation – in the evening hours, the university wished to upgrade its lighting infrastructure to provide better illumination.

At the same time, the university also wanted to conserve energy and nature. It aimed at becoming one of the safest and most eco-friendly universities by investing in cutting-edge technologies that are beneficial to all – students, lecturers, college staff, and the university itself.



For students, life revolves around the campus as they move between lecture halls, libraries, labs, eateries, sports facilities, and halls of residence. With a busy schedule, personal safety is the last thing they need to worry about. We want to give every student a safe and comfortable environment so that they can focus on learning and experience great campus life.

**Royal Holloway, University of London**

# Solution

## Smart Street Lights with Motion Sensors

The university upgraded its lights to LED street lights and chose Twilight's award-winning street light motion sensor, CitySense Plus, for adaptive lighting.

CitySense Plus has an inbuilt luminaire controller and a wide detection range with a smart algorithm, which only detects humans and filters out interference elements such as small animals, birds, wind, rain, and snow.

The adaptive lighting system at the university campus ensures optimal illumination only when a human is detected. In the absence of activity, the street lights remain dimly lit, striking a perfect balance between safety and energy consumption. This system also helps reduce light pollution and the carbon emissions.

Twilight also provided its CityManager platform to help the university to remotely monitor and control each street light's performance and adjust illumination levels as needed. With the platform, the university can also easily identify and locate faults, reducing

operating and maintenance costs while keeping the lighting infrastructure pristine. The platform also features heatmaps, which highlight paths that are frequently used, helping the university plan better amenities on those routes.

The CityManager smart lighting platform is open, interoperable, and TALQ-certified, enabling the university to incorporate various IoT technologies if needed, such as acoustic sensors and IP cameras, to further boost campus safety.



We are delighted to support University of London to make their Royal Holloway campus environmentally friendly as well as safer. Student safety is crucial at any university campus. Adaptive street lighting helps to beautifully combine safety with savings.

**Chintan Shah, Chairman, Twilight**

# Project Summary

## Location

Egham Hill, UK

## Client

Royal Holloway, University of London

## Project Partner

Siteco

## Application Areas

University Campus

## Products

CitySense Plus

CityManager



## About TVILIGHT

TVILIGHT PROJECTS B.V. is a European market leader specializing in motion sensors, wireless lighting controllers, and a complete portfolio of street light management software – to manage, monitor, operate and maintain citywide public lighting infrastructure. Our smart lighting platform and open API allow integration to city's preferred software platform and thus constitute an open, reliable and future-proof base for Smart Cities and the Internet of Things. The company has installed over 600 projects globally across 20+ countries, including iconic cities and critical infrastructure around the world. Tvilight's international projects include Amsterdam Airport Schiphol, Dutch Railways, Port of Moerdijk, Seoul, Beijing, as well as some of the largest German cities such as Düren, Münster, Cologne, Dortmund, and Berlin. To discover more about us and our products, **visit [www.tvilight.com](http://www.tvilight.com)**

References: **Osram Lighting Solutions, Siteco**